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With effect from 16<sup>th</sup> March 2016

# Electrification Products Price List (₹)

# Auxiliary contactors



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## Standard control contactors

|                 |                       | AC operated         |            |                   | DC operated         |                   |         |
|-----------------|-----------------------|---------------------|------------|-------------------|---------------------|-------------------|---------|
| No. of Contacts | Contact Configuration | Type Code Reference | Order Code | L.P.(₹)           | Type Code Reference | Order Code        | L.P.(₹) |
|                 | NO                    | NC                  |            |                   |                     |                   |         |
| 4               | 2                     | 2                   | N22E **    | 1SBH141001R□□22 ■ | NL22E **            | 1SBH143001R□□22 ■ | 1,560   |
| 4               | 3                     | 1                   | N31E **    | 1SBH141001R□□31 ■ | NL31E **            | 1SBH143001R□□31 ■ |         |
| 4               | 4                     | 0                   | N40E **    | 1SBH141001R□□40 ■ | NL40E **            | 1SBH143001R□□40 ■ |         |

Refer coil voltage & codes mentioned below.

## AC/DC operated

|                 |                       | AC/DC operated      |            |                   | AC/DC operated low consumption* |                 |         |
|-----------------|-----------------------|---------------------|------------|-------------------|---------------------------------|-----------------|---------|
| No. of Contacts | Contact Configuration | Type Code Reference | Order Code | L.P.(₹)           | Type Code Reference             | Order Code      | L.P.(₹) |
|                 | NO                    | NC                  |            |                   |                                 |                 |         |
| 4               | 2                     | 2                   | NF22E **   | 1SBH137001R□□22 ■ | NFZ22E **                       | 1SBH136001R□□22 | 2,250   |
| 4               | 3                     | 1                   | NF31E **   | 1SBH137001R□□31 ■ | NFZ31E **                       | 1SBH136001R□□31 |         |
| 4               | 4                     | 0                   | NF40E **   | 1SBH137001R□□40 ■ | NFZ40E **                       | 1SBH136001R□□40 |         |

Refer coil voltage & codes mentioned below.

\*Allows direct control by PLC output ≥ 24 V DC 500 mA

## Coil voltages and codes

### N range (AC operated)

| Voltage     | Voltage     | Code  |
|-------------|-------------|-------|
| □□ V - 50Hz | □□ V - 60Hz | □□    |
| 24          | 24          | 8 1 ■ |
| 110         | 110 ... 120 | 8 4   |
| 220 ... 230 | 230 ... 240 | 8 0 ■ |
| 400 ... 415 | 415 ... 440 | 8 6 ■ |

### NF range (AC/DC operated)

| Voltage    | Voltage   | Code |
|------------|-----------|------|
| V 50/60 Hz | V DC      | □□   |
| 24...60    | 20...60   | 1 1  |
| 48...130   | 48...130  | 1 2  |
| 100...250  | 100...250 | 1 3  |
| 250...500  | 250...500 | 1 4  |

Note: For Non standard coil voltage, other than this contact us for price

### NL (DC operated)

| Voltage | Code |
|---------|------|
| V DC    | □□   |
| 24      | 8 1  |
| 48      | 8 3  |
| 110     | 8 6  |
| 240     | 8 9  |

### NFZ range (AC/DC operated)

| Voltage    | Voltage   | Code |
|------------|-----------|------|
| V 50/60 Hz | V DC      | □□   |
| -          | 12...20   | 2 0  |
| 24...60    | 20...60   | 2 1  |
| 48...130   | 48...130  | 2 2  |
| 100...250  | 100...250 | 2 3  |

■ Stock items

# 3 pole contactors: AC operated



## Contactors: 3-pole – AC Operated

| AC1 duty<br>Amps | AC3 rating at 415V |      |      | Auxiliary Contacts |     | Type Code      | Order Code        | L.P.(₹)      |
|------------------|--------------------|------|------|--------------------|-----|----------------|-------------------|--------------|
|                  | Amps               | hP   | kW   |                    |     |                |                   |              |
| 25               | 9                  | 5.5  | 4    | 1NO                | -   | A09-30-10 **   | 1SBL141001R□□10 ■ | 980          |
| 25               | 9                  | 5.5  | 4    | -                  | 1NC | A09-30-01 **   | 1SBL141001R□□01 ■ | 980          |
| 27               | 12                 | 7.5  | 5.5  | 1NO                | -   | A12-30-10 **   | 1SBL161001R□□10 ■ | 1,110        |
| 27               | 12                 | 7.5  | 5.5  | -                  | 1NC | A12-30-01 **   | 1SBL161001R□□01 ■ | 1,110        |
| 30               | 17                 | 12.5 | 7.5  | 1NO                | -   | A16-30-10 **   | 1SBL181001R□□10 ■ | 1,270        |
| 30               | 17                 | 12.5 | 7.5  | -                  | 1NC | A16-30-01 **   | 1SBL181001R□□01 ■ | 1,270        |
| 45               | 26                 | 15   | 11   | 1NO                | -   | A26-30-10 **   | 1SBL241001R□□10 ■ | 1,830        |
| 45               | 26                 | 15   | 11   | -                  | 1NC | A26-30-01 **   | 1SBL241001R□□01 ■ | 1,830        |
| 55               | 32                 | 20   | 15   | 1NO                | -   | A30-30-10 **   | 1SBL281001R□□10 ■ | 3,530        |
| 55               | 32                 | 20   | 15   | -                  | 1NC | A30-30-01 **   | 1SBL281001R□□01 ■ | 3,530        |
| 60               | 37                 | 30   | 18.5 | 1NO                | -   | A40-30-10 **   | 1SBL321001R□□10 ■ | 5,650        |
| 60               | 37                 | 30   | 18.5 | -                  | 1NC | A40-30-01 **   | 1SBL321001R□□01 ■ | 5,650        |
| 100              | 50                 | 40   | 25   | -                  | -   | A50-30-00 **   | 1SBL351001R□□00 ■ | 6,400        |
| 115              | 65                 | 50   | 37   | -                  | -   | A63-30-00 **   | 1SBL371001R□□00 ■ | 9,000        |
| 125              | 75                 | 60   | 40   | -                  | -   | A75-30-00 **   | 1SBL411001R□□00 ■ | 11,300       |
| 145              | 96                 | 70   | 55   | 1NO                | 1NC | A95-30-11**    | 1SFL431001R□□11 ■ | 14,350       |
| 160              | 110                | 75   | 59   | 1NO                | 1NC | A110-30-11**   | 1SFL451001R□□11 ■ | 17,450       |
| 250              | 145                | 100  | 75   | 1NO                | 1NC | A145-30-11**   | 1SFL471001R□□11 ■ | 23,100       |
| 275              | 185                | 115  | 90   | 1NO                | 1NC | A185-30-11**   | 1SFL491001R□□11 ■ | 28,550       |
| 350              | 205                | 150  | 110  | 1NO                | 1NC | AF205-30-11**  | 1SFL527002R□□11   | 31,750       |
| 400              | 265                | 175  | 140  | 1NO                | 1NC | AF265-30-11**  | 1SFL547002R□□11   | 37,500       |
| 500              | 305                | 215  | 160  | 1NO                | 1NC | AF305-30-11**  | 1SFL587002R□□11   | 43,500       |
| 600              | 370                | 270  | 200  | 1NO                | 1NC | AF370-30-11**  | 1SFL607002R□□11   | 55,450       |
| 600              | 400                | 300  | 220  | 1NO                | 1NC | AF400-30-11**  | 1SFL577001R□□11   | 59,000       |
| 700              | 460                | 340  | 250  | 1NO                | 1NC | AF460-30-11**  | 1SFL597001R□□11   | 74,000       |
| 800              | 580                | 470  | 355  | 1NO                | 1NC | AF580-30-11**  | 1SFL617001R□□11   | 1,03,300     |
| 1050             | 750                | 570  | 425  | 1NO                | 1NC | AF750-30-11**  | 1SFL637001R□□11   | 1,57,500     |
| 1260             | -                  | -    | -    | 1NO                | 1NC | AF1250-30-11** | 1SFL647001R□□11   | Upon request |
| 1350             | 860                | -    | 500  | 1NO                | 1NC | AF1350-30-11** | 1SFL657001R□□11   |              |
| 1650             | 1050               | -    | 600  | 1NO                | 1NC | AF1650-30-11** | 1SFL677001R□□11   |              |
| 2050             | -                  | -    | -    | 1NO                | 1NC | AF2050-30-11** | 1SFL707001R□□11   |              |
| 2650             | -                  | -    | -    | 1NO                | 1NC | AF2650-30-11** | 1SFL667001R□□11   |              |

Complete the contactor type code by replacing \*\* with desired coil voltage AF contactors have advanced electronic coil interface with wideband AC/DC coil For AG contactors (AC contactors with wide band coil 200...240 V AC) R38 coil code to be considered and additional cost of Rs. 125 applicable on the MRP of A contactors.

## Coil voltages and codes:

### A 09 ... A 185, range

| Voltage<br>V - 50Hz | Voltage<br>V - 60Hz | Code<br>□□ |
|---------------------|---------------------|------------|
| 24                  | 24                  | 8 1        |
| 110                 | 110 ... 120         | 8 4 ■      |
| 220 ... 230         | 230 ... 240         | 8 0 ■      |
| 400 ... 415         | 415 ... 440         | 8 6 ■      |

### AF400 and above (AC/DC operated)

| Voltage<br>V 50/60 Hz | Voltage<br>V DC | Code<br>□□ |
|-----------------------|-----------------|------------|
| -                     | 24...60         | 6 8        |
| 48...130              | 48...130        | 6 9        |
| 100...250             | 100...250       | 7 0        |
| 250...500             | 250...500       | 7 1        |

### New AF205...AF370 range (AC/DC operated)

| Voltage<br>V 50/60 Hz | Voltage<br>V DC | Code<br>□□ |
|-----------------------|-----------------|------------|
| 24...60               | 20...60         | 1 1        |
| 48...130              | 48...130        | 1 2        |
| 100...250             | 100...250       | 1 3        |
| 250...500             | 250...500       | 1 4        |

Note: For Non standard coil voltage, other than this contact us for price



# 4 pole contactors: AC operated



Contactors: 4-pole (AC operated)

| Rating at 415V<br>AC1 Amps | Main Contact<br>Arrangement |     | Auxiliary Contacts |     | Type Code Reference    | Order Code       | L.P.(₹)  |
|----------------------------|-----------------------------|-----|--------------------|-----|------------------------|------------------|----------|
| 25                         | 4NO                         | -   | -                  | -   | A09-40-00 **           | 1SBL141201R□□□00 | 1,300    |
| 25                         | 2NO                         | 2NC | -                  | -   | A09-22-00 **           | 1SBL141501R□□□00 | 1,550    |
| 30                         | 4NO                         | -   | -                  | -   | A16-40-00 **           | 1SBL181201R□□□00 | 1,380    |
| 30                         | 2NO                         | 2NC | -                  | -   | A16-22-00 **           | 1SBL181501R□□□00 | 1,620    |
| 45                         | 4NO                         | -   | -                  | -   | A26-40-00 **           | 1SBL241201R□□□00 | 2,470    |
| 45                         | 2NO                         | 2NC | -                  | -   | A26-22-00 **           | 1SBL241501R□□□00 | 3,100    |
| 70                         | 4NO                         | -   | -                  | -   | A45-40-00**            | 1SBL331201R□□□00 | 6,500    |
| 70                         | 2NO                         | 2NC | -                  | -   | A45-22-00**            | 1SBL331501R□□□00 | 9,300    |
| 100                        | 4NO                         | -   | -                  | -   | A50-40-00**            | 1SBL351201R□□□00 | 9,300    |
| 125                        | 4NO                         | -   | -                  | -   | A75-40-00**            | 1SBL411201R□□□00 | 12,400   |
| 125                        | 2NO                         | 2NC | -                  | -   | A75-22-00**            | 1SBL411501R□□□00 | 14,200   |
| 160                        | 4NO                         | -   | -                  | -   | AF116-40-00 <b>NEW</b> | 1SFL427102R□□□00 | 20,500   |
| 200                        | 4NO                         | -   | -                  | -   | AF140-40-00 <b>NEW</b> | 1SFL447102R□□□00 | 25,000   |
| 275                        | 4NO                         | -   | -                  | -   | AF190-40-00 <b>NEW</b> | 1SFL487102R□□□00 | 35,000   |
| 350                        | 4NO                         | -   | -                  | -   | AF205-40-00 <b>NEW</b> | 1SFL527102R□□□00 | 41,000   |
| 400                        | 4NO                         | -   | -                  | -   | AF265-40-00 <b>NEW</b> | 1SFL547102R□□□00 | 48,720   |
| 500                        | 4NO                         | -   | -                  | -   | AF305-40-00 <b>NEW</b> | 1SFL587102R□□□00 | 60,000   |
| 525                        | 4NO                         | -   | -                  | -   | AF370-40-00 <b>NEW</b> | 1SFL607102R□□□00 | 72,000   |
| 800                        | 4NO                         | -   | 1NO                | 1NC | EK550-40-11 **         | SK827041 - □□    | 1,15,000 |
| 1000                       | 4NO                         | -   | 1NO                | 1NC | EK1000-40-11 **        | SK827044 - □□    | 1,60,000 |

**NEW** AF contactors are with wide band coil can be operated on both AC and DC Voltages, with built-in Surge suppressors

Complete the contactor type code by replacing \*\* with desired coil voltage

## Coil voltages and codes:

### A 09 ... A 75 , range

| Voltage<br>□□ V - 50Hz | Voltage<br>□□ V - 60Hz | Code<br>□□ |
|------------------------|------------------------|------------|
| 24                     | 24                     | 8 1        |
| 110                    | 110 ... 120            | 8 4        |
| 220 ... 230            | 230 ... 240            | 8 0        |
| 400 ... 415            | 415 ... 440            | 8 6        |

## Coil voltages and codes: EK 550 ... EK 1000

| Voltage<br>□□ V - 50Hz | Voltage<br>□□ V - 60Hz | Code<br>□□ |
|------------------------|------------------------|------------|
| -                      | 110                    | A E        |
| 110                    | 120                    | A F        |
| 220 ... 230            | *                      | A L        |
| 230 ... 240            | -                      | A M        |
| 400 ... 415            | -                      | A R        |

Note: For Non standard coil voltage, other than this contact us for price

## Coil voltages and codes: New AF 116 - AF 370 (AC/DC operated)

| Voltage<br>V 50/60 Hz | Voltage<br>V DC | Code<br>□□ |
|-----------------------|-----------------|------------|
| 24...60               | 20...60         | 1 1        |
| 48...130              | 48...130        | 1 2        |
| 100...250             | 100...250       | 1 3        |
| 250...500             | 250...500       | 1 4        |

(1) The connection polarities indicated close to the coil terminals must be respected:  
A1 for the positive pole and A2 for the negative pole.

# 3 pole contactors AL and TAL range: DC operated

**AL.., TAL..** contactors are mainly used for controlling 3-phase motors and more generally for controlling power circuits both ac & dc. These contactors have a low power consumption

for direct control from PLC outputs. Consequently they are perfectly adapted for all applications associated with PLC control.

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## AL Contactors

| AC 1 duty<br>Amps | AC3 rating at 415V |     |      | Auxiliary contacts |     | Type code<br>reference | Order Code        | L.P.(₹) |
|-------------------|--------------------|-----|------|--------------------|-----|------------------------|-------------------|---------|
|                   | Amps               | hP  | kW   |                    |     |                        |                   |         |
| 25                | 9                  | 5   | 4    | 1NO                | -   | AL 9-30-10             | 1SBL143001R□□10 ■ | 1,650   |
| 25                | 9                  | 5   | 4    | -                  | 1NC | AL 9-30-01             | 1SBL143001R□□01 ■ | 1,650   |
| 27                | 12                 | 7.5 | 5.5  | 1NO                | -   | AL 12-30-10            | 1SBL163001R□□10 ■ | 1,800   |
| 27                | 12                 | 7.5 | 5.5  | -                  | 1NC | AL 12-30-01            | 1SBL163001R□□01 ■ | 1,800   |
| 30                | 17                 | 10  | 7.5  | 1NO                | -   | AL 16-30-10            | 1SBL183001R□□10 ■ | 2,300   |
| 30                | 17                 | 10  | 7.5  | -                  | 1NC | AL 16-30-01            | 1SBL183001R□□01 ■ | 2,300   |
| 45                | 26                 | 20  | 11   | 1NO                | -   | AL 26-30-10            | 1SBL243001R□□10 ■ | 2,900   |
| 45                | 26                 | 20  | 11   | -                  | 1NC | AL 26-30-01            | 1SBL243001R□□01 ■ | 2,900   |
| 55                | 32                 | 25  | 15   | 1NO                | -   | AL 30-30-10            | 1SBL283001R□□10 ■ | 6,250   |
| 55                | 32                 | 25  | 15   | -                  | 1NC | AL 30-30-01            | 1SBL283001R□□01 ■ | 6,250   |
| 60                | 37                 | 30  | 18.5 | 1NO                | -   | AL 40-30-10            | 1SBL323001R□□10 ■ | 7,500   |
| 60                | 37                 | 30  | 18.5 | -                  | 1NC | AL 40-30-01            | 1SBL323001R□□01 ■ | 7,500   |



## TAL Contactors

| AC 1 duty<br>Amps | AC3 rating at 415V |     |      | Auxiliary contacts |     | Type code<br>reference | Order Code      | L.P.(₹) |
|-------------------|--------------------|-----|------|--------------------|-----|------------------------|-----------------|---------|
|                   | Amps               | hP  | kW   |                    |     |                        |                 |         |
| 25                | 9                  | 5   | 4    | 1NO                | -   | TAL 9-30-10            | 1SBL143061R□□10 | 1,950   |
| 25                | 9                  | 5   | 4    | -                  | 1NC | TAL 9-30-01            | 1SBL143061R□□01 | 1,950   |
| 27                | 12                 | 7.5 | 5.5  | 1NO                | -   | TAL 12-30-10           | 1SBL163061R□□10 | 2,170   |
| 27                | 12                 | 7.5 | 5.5  | -                  | 1NC | TAL 12-30-01           | 1SBL163061R□□01 | 2,170   |
| 30                | 17                 | 10  | 7.5  | 1NO                | -   | TAL 16-30-10           | 1SBL183061R□□10 | 2,570   |
| 30                | 17                 | 10  | 7.5  | -                  | 1NC | TAL 16-30-01           | 1SBL183061R□□01 | 2,570   |
| 45                | 26                 | 20  | 11   | 1NO                | -   | TAL 26-30-10           | 1SBL243061R□□10 | 3,500   |
| 45                | 26                 | 20  | 11   | -                  | 1NC | TAL 26-30-01           | 1SBL243061R□□01 | 3,500   |
| 55                | 32                 | 25  | 15   | 1NO                | -   | TAL 30-30-10           | 1SBL283061R□□10 | 6,900   |
| 55                | 32                 | 25  | 15   | -                  | 1NC | TAL 30-30-01           | 1SBL283061R□□01 | 6,900   |
| 60                | 37                 | 30  | 18.5 | 1NO                | -   | TAL 40-30-10           | 1SBL323061R□□10 | 7,700   |
| 60                | 37                 | 30  | 18.5 | -                  | 1NC | TAL 40-30-01           | 1SBL323061R□□01 | 7,700   |

## Coil voltages and codes: AL

| Voltage | Code  |
|---------|-------|
| V DC    | □□    |
| 24      | 8 1   |
| 110     | 8 6 ■ |
| 240     | 8 9   |

Other voltages: consult us.

## Coil voltages and codes: TAL

| Voltage   | Code |
|-----------|------|
| V DC      | □□   |
| 25...45   | 5 2  |
| 77...143  | 6 2  |
| 90...150  | 6 6  |
| 152...264 | 6 8  |

■ Stock items

# Contactors for special application - capacitors switching

## Contactors for capacitor switching: 3 pole – AC operated: Peak current - unlimited

| kVAR Rating at 415V                           | Peak inrush current | Auxiliary Contacts | Type Code reference | Order Code        | L.P.(₹) |
|-----------------------------------------------|---------------------|--------------------|---------------------|-------------------|---------|
| Type UA...RA with in-built damping resistors: |                     |                    |                     |                   |         |
| 12.5                                          | Unlimited           | 1NO                | UA16-30-10RA **     | 1SBL181024R□□10 ■ | 2,450   |
| 22                                            | Unlimited           | 1NO                | UA26-30-10RA **     | 1SBL241024R□□10 ■ | 4,100   |
| 30                                            | Unlimited           | 1NO                | UA30-30-10RA**      | 1SBL281024R□□10 ■ | 4,700   |
| 40                                            | Unlimited           | --                 | UA50-30-00RA        | 1SBL351024R□□00   | 13,000  |
| 50                                            | Unlimited           | --                 | UA63-30-00RA**      | 1SBL371024R□□00   | 14,000  |
| 60                                            | Unlimited           | --                 | UA75-30-00RA**      | 1SBL411024R□□00   | 15,300  |
| 70                                            | Unlimited           | --                 | UA95-30-00RA**      | 1SFL431024R□□00   | 17,800  |
| 80                                            | Unlimited           | --                 | UA110-30-00RA**     | 1SFL451024R□□00   | 19,550  |

### Type UA...RA with in-built damping resistors

Complete the contactor type code by replacing \*\* with desired coil voltage

Price for UAF 50-30 - 00RA..... UAF110-30-00RA (with wide band electronic coil 100...250V AC/DC) on request



## Peak current $\hat{I} \leq 100$ times the rms current

| kVAR Rating at 415V | Max peak current $\hat{I}$ | Auxiliary contacts fitted |    | Type        | Order code      | L.P.(₹) |
|---------------------|----------------------------|---------------------------|----|-------------|-----------------|---------|
| kvar                | kA                         | NO                        | NC |             |                 |         |
| 12.5                | 1.8                        | 1                         | 0  | UA16-30-10  | 1SBL181022R□□10 | 1,900   |
| 20                  | 3                          | 1                         | 0  | UA26-30-10  | 1SBL241022R□□10 | 2,370   |
| 27.5                | 33.5                       | 1                         | 0  | UA30-30-10  | 1SBL281022R□□10 | 4,200   |
| 33                  | 5                          | 0                         | 0  | UA50-30-00  | 1SBL351022R□□00 | 9,500   |
| 45                  | 6.5                        | 0                         | 0  | UA63-30-00  | 1SBL371022R□□00 | 10,000  |
| 50                  | 7.5                        | 0                         | 0  | UA75-30-00  | 1SBL411022R□□00 | 11,900  |
| 65                  | 9.3                        | 1                         | 1  | UA95-30-11  | 1SBL431022R□□11 | 15,000  |
| 75                  | 10.5                       | 1                         | 1  | UA110-30-11 | 1SBL451022R□□11 | 18,750  |

## Single step - Peak current $\hat{I} \leq 30$ times the rms current

| kVAR Rating at 415V | Type Code     | Order Code        | L.P.(₹)  |
|---------------------|---------------|-------------------|----------|
| 60                  | A95-30-11**   | 1SFL431001R□□11 ■ | 14,350   |
| 70                  | A110-30-11**  | 1SFL451001R□□11 ■ | 17,450   |
| 90                  | A145-30-11**  | 1SFL471001R□□11 ■ | 23,100   |
| 110                 | A185-30-11**  | 1SFL491001R□□11 ■ | 28,550   |
| 130                 | AF205-30-11** | 1SFL527002R□□11   | 31,750   |
| 145                 | AF265-30-11** | 1SFL547002R□□11   | 37,500   |
| 165                 | AF305-30-11** | 1SFL587002R□□11   | 43,500   |
| 200                 | AF370-30-11** | 1SFL607002R□□11   | 55,450   |
| 210                 | AF400-30-11** | 1SFL577001R□□11   | 59,000   |
| 240                 | AF460-30-11** | 1SFL597001R□□11   | 74,000   |
| 285                 | AF580-30-11** | 1SFL617001R□□11   | 1,03,300 |
| 400                 | AF750-30-11** | 1SFL637001R□□11   | 1,57,500 |

## Coil voltages and codes UA...RA

| Voltage     | Voltage     | Code  |
|-------------|-------------|-------|
| □□ V - 50Hz | □□ V - 60Hz | □□    |
| 24          | 24          | 8 1   |
| 110         | 110 ... 120 | 8 4 ■ |
| 220 ... 230 | 230 ... 240 | 8 0 ■ |
| 400 ... 415 | 415 ... 440 | 8 6 ■ |

Note: Refer page no 60 for selection of AF contactor coil voltage

# Contactors for DC circuit switching: AC/DC operated

1

| Coil | Current Ratings at 440V DC |      |      | Type Code reference | Order Code      | L.P.(₹)      |
|------|----------------------------|------|------|---------------------|-----------------|--------------|
|      | DC-1                       | DC-3 | DC-5 |                     |                 |              |
| AC   | 100A                       | 85A  | 50A  | GA75-10-11 **       | 1SBL411025R□□11 | Upon request |
| DC   | 100A                       | 85A  | 50A  | GAE75-10-11 **      | 1SBL419025R□□11 |              |

Complete the contactor type code by replacing \*\* with desired coil voltage

| Coil  | Current Ratings at 1000V DC | Type Code reference | Order Code      | L.P.(₹)      |
|-------|-----------------------------|---------------------|-----------------|--------------|
|       | DC-1 L/R 1 ms               |                     |                 |              |
| AC/DC | 275A                        | GAF185-10-11        | 1SFL497025R□□11 | Upon request |
|       | 450A                        | GAF300-10-11        | 1SFL557025R□□11 |              |
|       | 700A                        | GAF460-10-11        | 1SFL597025R□□11 |              |
|       | 1050A                       | GAF750-10-11        | 1SFL637025R□□11 |              |
|       | 1250A                       | GAF1250-10-11       | 1SFL647025R□□11 |              |
|       | 1650A                       | GAF1650-10-11       | 1SFL677025R□□11 |              |
|       | 2050A                       | GAF2050-10-11       | 1SFL707025R□□11 |              |

DC3, DC5 ratings refer technical catalog

## Coil voltages and codes: GA 75

| Voltage                                                                                   | Voltage                                                                                    | Code |
|-------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------|------|
|  V - 50Hz |  V - 60Hz | □□   |
| 24                                                                                        | 24                                                                                         | 8 1  |
| 110                                                                                       | 110 ... 120                                                                                | 8 4  |
| 220 ... 230                                                                               | 230 ... 240                                                                                | 8 0  |
| 400 ... 415                                                                               | 415 ... 440                                                                                | 8 6  |

## Coil voltages and codes: GAE 75

| Voltage                                                                                  | Code |
|------------------------------------------------------------------------------------------|------|
|  V d.c. | □□   |
| 12                                                                                       | 8 0  |
| 24                                                                                       | 8 2  |
| 42                                                                                       | 8 1  |
| 110                                                                                      | 8 6  |
| 240                                                                                      | 8 9  |

## Coil voltages and codes: GAF range (AC/DC operated)

| Voltage                                                                                        | Voltage                                                                                  | Code |
|------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------|------|
|  V 50/60 Hz |  V DC | □□   |
| -                                                                                              | 24...60                                                                                  | 6 8  |
| 48...130                                                                                       | 48...130                                                                                 | 6 9  |
| 100...250                                                                                      | 100...250                                                                                | 7 0  |
| 250...500                                                                                      | 250...500                                                                                | 7 1  |

# Accessories for contactors

## Auxiliary contact block



| Description                             | Mounting on Contactors                                                                                | Contact Configuration |     | Type Code Reference | Order Code | L.P.(₹)               |
|-----------------------------------------|-------------------------------------------------------------------------------------------------------|-----------------------|-----|---------------------|------------|-----------------------|
|                                         |                                                                                                       | NO                    | NC  |                     |            |                       |
| Front mounted single pole add-on blocks | A9...A110<br>AL9...AL40,<br>TAL9...TAL40<br>AE45...AE110,<br>TAE45...TAE110<br>N,NL &UA               | AF45...AF110          | 1NO | -                   | CA5-10     | 1SBN010010R1010 ■ 170 |
|                                         |                                                                                                       |                       | -   | 1NC                 | CA5-01     | 1SBN010010R1001 ■ 170 |
|                                         |                                                                                                       |                       | 4NO | -                   | CA 5-40 E  | 1SBN 010 040 R1040    |
|                                         |                                                                                                       |                       | 3NO | 1NC                 | CA 5-31 E  | 1SBN 010 040 R1031    |
|                                         |                                                                                                       |                       | 2NO | 2NC                 | CA 5-22 E  | 1SBN 010 040 R1022    |
|                                         |                                                                                                       |                       | -   | 4NC                 | CA 5-04 E  | 1SBN 010 040 R1004    |
| Side mounted 2 pole add-on blocks       | A9...A75, AL9...AL40,<br>TAL9...TAL40, AE45...AE75,<br>TAE45...TAE75, AF45...AF75<br>N,NL & UA 16..75 | AF45...AF75           | 1NO | 1NC                 | CAL5-11    | 1SBN010020R1011 ■ 580 |
|                                         |                                                                                                       |                       | 1NO | 1NC                 | CAL18-11   | 1SFN010720R1011 ■     |
|                                         |                                                                                                       |                       | 1NO | 1NC                 | CAL18-11B  | 1SFN010720R3311 ■ 650 |
|                                         |                                                                                                       |                       | 1NO | 1NC                 | CAL19-11   | 1SFN010820R1011 ■     |
|                                         |                                                                                                       |                       | 1NO | 1NC                 | CAL 19-11B | 1SFN010820R3311 ■     |
|                                         |                                                                                                       |                       | 1NO | 1NC                 | CAL19-11B  | 1SFN010820R3311 ■     |

## Auxiliary contact blocks for EK Range of contactors:

| Description                                     | Mounting on Contactors | Contact Configuration |     | Type Code Reference | Order Code | L.P.(₹) |
|-------------------------------------------------|------------------------|-----------------------|-----|---------------------|------------|---------|
|                                                 |                        | NO                    | NC  |                     |            |         |
| Side mounting Two Pole Auxiliary contact blocks | EK110 . . . EK1000     | 1NO                   | 1NC | CAL16-11A           | SK829002-A | 650     |
|                                                 |                        | 1NO                   | 1NC | CAL16-11B           | SK829002-B |         |
|                                                 |                        | 1NO                   | 1NC | CAL16-11C           | SK829002-C |         |
|                                                 |                        | 1NO                   | 1NC | CAL16-11D           | SK829002-D |         |

\* Refer technical catalogue for proper selection.

# Accessories for contactors



## Surge suppressors

| For contactor types                                                                   | Voltage Range    | Type Code reference | Order Code        | L.P.(₹) |
|---------------------------------------------------------------------------------------|------------------|---------------------|-------------------|---------|
| AL9...AL40,<br>AE45...AE110,<br>TAL9...TAL40<br>TAE45...TAE110<br>NL/TNL,             | 12...32 DC       | RT 5/32             | 1SBN050020R1000   | 660     |
|                                                                                       | 25...65 DC       | RT 5/65             | 1SBN050020R1001   |         |
|                                                                                       | 50...90 DC       | RT 5/90             | 1SBN050020R1002   |         |
|                                                                                       | 77...150 DC      | RT 5/150            | 1SBN050020R1003   |         |
|                                                                                       | 150...264 DC     | RT5/264             | 1SBN050020R1004   |         |
| A9...A110, AL9...AL40,<br>AE45...AE110,TAL9...<br>TAL40, TAE45...<br>TAE110, N/NL/TNL | 24...50V AC/DC   | RV 5/50             | 1SBN050010R1000   | 660     |
|                                                                                       | 50...133V AC/DC  | RV 5/133            | 1SBN050010R1001   |         |
|                                                                                       | 110...250V AC/DC | RV 5/250            | 1SBN050010R1002 ■ |         |
|                                                                                       | 250...440V AC/DC | RV 5/440            | 1SBN050010R1003   |         |
| A9...A40 , N                                                                          | 24...50V AC      | RC 5-1/50           | 1SBN050100R1000   | 660     |
|                                                                                       | 50...133V AC     | RC 5-1/133          | 1SBN050100R1001   |         |
|                                                                                       | 110...250V AC    | RC 5-1/250          | 1SBN050100R1002 ■ |         |
|                                                                                       | 250...440V AC    | RC 5-1/440          | 1SBN050100R1003   |         |
| A45...A110                                                                            | 24...50V AC      | RC 5-2/50           | 1SBN050200R1000   | 700     |
|                                                                                       | 50...133V AC     | RC 5-2/133          | 1SBN050200R1001   |         |
|                                                                                       | 110...250V AC    | RC 5-2/250          | 1SBN050200R1002 ■ |         |
|                                                                                       | 250...440V AC    | RC 5-2/440          | 1SBN050200R1003   |         |
| A145...A300                                                                           | 250...440        | RC 5-3/440          | 1SFN050300R1003   | 2,000   |
| EK550.....EK1000                                                                      | 48...110V/AC     | RC-EH 800/110       | SK 829 007-C      | 3,750   |
|                                                                                       | 220...600V/AC    | RC-EH 800/600       | SK 829 007-D      |         |

## Mechanical interlocks

| For contactor types                 | Description                                                    | Type Code reference | Order Code        | L.P.(₹) |
|-------------------------------------|----------------------------------------------------------------|---------------------|-------------------|---------|
| A9...A40, AL9...AL40                | Horizontal Mechanical Interlock                                | VM 5-1              | 1SBN030100R1000 ■ | 450     |
| A9...A40, AL9...AL40                | Horizontal Mechanical & Electrical Interlock with 2NC contacts | VE 5-1              | 1SBN030110R1000 ■ | 700     |
| A30...A110                          | Horizontal Mechanical & Electrical Interlock with 2NC contacts | VE 5-2              | 1SBN030210R1000 ■ | 1,400   |
| A95...A185,<br>A210...A300          | Horizontal with 2NC contacts                                   | VM 300H             | 1SFN034700R1000   | 2,900   |
| EK110...EK150                       | Horizontal Mechanical Interlock                                | VH145               | SK829071-A        | 3,850   |
| EK175...EK210                       | Horizontal Mechanical Interlock                                | VH300               | SK829071-B        | 4,490   |
| AF116...AF146 and<br>AF190, AF205   | Horizontal Mechanical Interlock                                | VM140/190           | 1SFN034403R1000   | 2,900   |
| AF190, AF205 and<br>AF265 ... AF370 | Horizontal Mechanical Interlock                                | VM205/265           | 1SFN035203R1000   | 2,900   |
| AF116...AF370                       | Horizontal Mechanical Interlock                                | VM19                | 1SFN030300R1000   | 3000    |

Note: Refer technical catalogue for proper selection.

## Mechanical latching units

### Description

For converting standard contactors into latched contactors. The WB75-A block contains a mechanical latching device with electromagnetic impulse unlatching (AC or DC) or manual unlatching. Captive screw type connecting terminals, built-in cable clamps, M3.5 (+,-) pozidriv 2 screw with screwdriver guidance; delivered untightened and protected against accidental direct contact.

### Ordering Details

| For contactors | Rated control circuit voltage Uc |           | Type   | Order code      | L.P.(₹) |
|----------------|----------------------------------|-----------|--------|-----------------|---------|
|                | V 50 Hz or DC                    | V 60 Hz   |        |                 |         |
| N, NL, A9, A75 | 24                               | 24...28   | WB75-A | FPTN372726R1001 | 5,300   |
|                | 220...230                        | 220...255 | WB75-A | FPTN372726R1006 | 5,300   |

■ Stock items



# 3 pole contactors: AX09...AX370 : AC operated

NEW

## AX Contactor

AX contactors are mainly used for controlling 3-phase motors and power circuits up to 690 V AC.

These contactors are of the block type design with

- 3 main poles and built-in auxiliary contact
- control circuit: AC operated
- add-on auxiliary contact blocks for front or side mounting and a wide range of accessories.

1

## Contactors: 3-pole – AC Operated

| AC1 duty<br>Amps | AC3 rating at 415V |      | Auxiliary Contacts |     | Type Code   | Order Code      | L.P.(₹) |
|------------------|--------------------|------|--------------------|-----|-------------|-----------------|---------|
|                  | Amps               | kW   |                    |     |             |                 |         |
| 22               | 9                  | 4    | 1NO                | -   | AX09-30-10  | 1SBL901074R□□10 | 840     |
| 22               | 9                  | 4    | -                  | 1NC | AX09-30-01  | 1SBL901074R□□01 | 840     |
| 25               | 12                 | 5.5  | 1NO                | -   | AX12-30-10  | 1SBL911074R□□10 | 940     |
| 25               | 12                 | 5.5  | -                  | 1NC | AX12-30-01  | 1SBL911074R□□01 | 940     |
| 27               | 18                 | 9    | 1NO                | -   | AX18-30-10  | 1SBL921074R□□10 | 1,020   |
| 27               | 18                 | 9    | -                  | 1NC | AX18-30-01  | 1SBL921074R□□01 | 1,020   |
| 32               | 25                 | 11   | 1NO                | -   | AX25-30-10  | 1SBL931074R□□10 | 1,470   |
| 32               | 25                 | 11   | -                  | 1NC | AX25-30-01  | 1SBL931074R□□01 | 1,470   |
| 55               | 32                 | 15   | 1NO                | -   | AX32-30-10  | 1SBL281074R□□10 | 3,050   |
| 55               | 32                 | 15   | -                  | 1NC | AX32-30-01  | 1SBL281074R□□01 | 3,050   |
| 60               | 40                 | 18.5 | 1NO                | -   | AX40-30-10  | 1SBL321074R□□10 | 4,770   |
| 60               | 40                 | 18.5 | -                  | 1NC | AX40-30-01  | 1SBL321074R□□01 | 4,770   |
| 100              | 50                 | 25   | 1NO                | 1NC | AX50-30-11  | 1SBL351074R□□11 | 5,990   |
| 115              | 65                 | 30   | 1NO                | 1NC | AX65-30-11  | 1SBL371074R□□11 | 8,100   |
| 125              | 80                 | 37   | 1NO                | 1NC | AX80-30-11  | 1SBL411074R□□11 | 10,000  |
| 145              | 96                 | 45   | 1NO                | 1NC | AX95-30-11  | 1SFL431074R□□11 | 11,600  |
| 160              | 115                | 55   | 1NO                | 1NC | AX115-30-11 | 1SFL981074R□□11 | 14,400  |
| 190              | 150                | 75   | 1NO                | 1NC | AX150-30-11 | 1SFL991074R□□11 | 19,250  |
| 250              | 185                | 90   | 1NO                | 1NC | AX185-30-11 | 1SFL491074R□□11 | 22,600  |
| 275              | 205                | 110  | 1NO                | 1NC | AX205-30-11 | 1SFL501074R□□11 | 27,200  |
| 400              | 265                | 132  | 1NO                | 1NC | AX260-30-11 | 1SFL547074R□□11 | 32,700  |
| 500              | 305                | 160  | 1NO                | 1NC | AX300-30-11 | 1SFL587074R□□11 | 39,400  |
| 600              | 370                | 200  | 1NO                | 1NC | AX370-30-11 | 1SFL607074R□□11 | 48,700  |

Complete the contactor code by replacing □□ with desired coil voltages as per below table

## Auxiliary contactors: NX

### NX Contactor

NX contactors are mainly used for switching auxiliary circuits and control circuits.

These contactors are of the block type design with

- 4 poles. Contactor relays have mechanically linked auxiliary contact elements.
- add-on auxiliary contact blocks for front or side mounting and a wide range of accessories.



|                    |                       |    | AC operated         |                 |         |
|--------------------|-----------------------|----|---------------------|-----------------|---------|
| No: of<br>Contacts | Contact Configuration |    | Type Code Reference | Order Code      | L.P.(₹) |
|                    | NO                    | NC |                     |                 |         |
| 4                  | 2                     | 2  | NX22E               | 1SBH901074R□□22 | 890     |
| 4                  | 3                     | 1  | NX31E               | 1SBH901074R□□31 |         |
| 4                  | 4                     | 0  | NX40E               | 1SBH901074R□□40 |         |

### Coil voltages and codes AX range

| Voltage     | Voltage     | Code |
|-------------|-------------|------|
| □□ V - 50Hz | □□ V - 60Hz | □□   |
| 24          | 24          | 8 1  |
| 110         | 110         | 8 4  |
| 220 ... 230 | 220 ... 230 | 8 0  |
| 400 ... 415 | 400 ... 415 | 8 6  |

Complete the contactor code by replacing □□ with desired coil voltages as per below table

■ Stock items

# Accessories for AX contactors NEW



## Auxiliary contact block

| Description                             | Mounting on Contactors  | Contact Configuration |     | Type Code Reference | Order Code        | L.P.(₹) |
|-----------------------------------------|-------------------------|-----------------------|-----|---------------------|-------------------|---------|
|                                         |                         | NO                    | NC  |                     |                   |         |
| Front mounted single pole add-on blocks | AX09...AX150, NX 4-pole | 1NO                   | -   | CA5X-10             | 1SBN019010R1010   | 160     |
|                                         |                         | -                     | 1NC | CA5X-01             | 1SBN019010R1001   | 160     |
| Front mounted Four pole add-on blocks   | AX09...AX150, NX 4-pole | 2NO                   | 2NC | CA5X-22E            | 1SBN019040R1022   | 590     |
|                                         |                         | 3NO                   | 1NC | CA5X-31E            | 1SBN019040R1031   |         |
|                                         |                         | 4NO                   | -   | CA5X-40E            | 1SBN019040R1040   |         |
|                                         |                         | -                     | 4NC | CA5X-04E            | 1SBN019040R1004   |         |
| Side mounted 2 pole add-on blocks       | AX09...AX80, NX 4-pole  | 1NO                   | 1NC | CAL5X-11            | 1SBN019020R1011   | 550     |
|                                         |                         | 1NO                   | 1NC | CAL18X-11           | 1SBN019820R1011   | 560     |
|                                         | AX95...AX205            | 1NO                   | 1NC | CAL18X-11B          | 1SBN019820R3311   | 560     |
|                                         |                         | 1NO                   | 1NC | CAL19-11            | 1SBN010820R1011 ■ | 650     |
|                                         | AX260...AX370           | 1NO                   | 1NC | CAL19-11B           | 1SBN010820R3311 ■ | 650     |
|                                         |                         | 1NO                   | 1NC | CAL19-11B           | 1SBN010820R3311 ■ | 650     |

## Surge suppressors

| For contactor types | Voltage Range    | Type Code reference | Order Code        | L.P.(₹) |
|---------------------|------------------|---------------------|-------------------|---------|
| AX09...AX150        | 24...50V AC/DC   | RV 5/50             | 1SBN050010R1000   | 660     |
|                     | 50...133V AC/DC  | RV 5/133            | 1SBN050010R1001   |         |
|                     | 110...250V AC/DC | RV 5/250            | 1SBN050010R1002 ■ |         |
|                     | 250...440V AC/DC | RV 5/440            | 1SBN050010R1003   |         |
| AX09...AX40         | 24...50V AC      | RC 5-1/50           | 1SBN050100R1000   | 660     |
|                     | 50...133V AC     | RC 5-1/133          | 1SBN050100R1001   |         |
|                     | 110...250V AC    | RC 5-1/250          | 1SBN050100R1002 ■ |         |
|                     | 250...440V AC    | RC 5-1/440          | 1SBN050100R1003   |         |
| AX50...AX150        | 24...50V AC      | RC 5-2/50           | 1SBN050200R1000   | 700     |
|                     | 50...133V AC     | RC 5-2/133          | 1SBN050200R1001   |         |
|                     | 110...250V AC    | RC 5-2/250          | 1SBN050200R1002 ■ |         |
|                     | 250...440V AC    | RC 5-2/440          | 1SBN050200R1003   |         |
| AX185...AX205       | 250...440        | RC 5-3/440          | 1SBN050300R1003   | 2,000   |

## Mechanical interlocks

| For contactor types | Description                                                    | Type Code reference | Order Code        | L.P.(₹) |
|---------------------|----------------------------------------------------------------|---------------------|-------------------|---------|
| AX09...AX40         | Horizontal Mechanical Interlock                                | VM 5-1              | 1SBN030100R1000 ■ | 450     |
| AX09...AX40         | Horizontal Mechanical & Electrical Interlock with 2NC contacts | VE 5-1              | 1SBN030110R1000 ■ | 700     |
| AX50...AX115        | Horizontal Mechanical & Electrical Interlock with 2NC contacts | VE 5-2              | 1SBN030210R1000 ■ | 1,400   |
| AX185...AX205       | Horizontal with 2NC contacts                                   | VM 300H             | 1SBN034700R1000   | 2,900   |
| AX260...AX370       | Horizontal Mechanical Interlock                                | VM19                | 1SBN030300R1000   | 3,000   |

Note: Refer technical catalogue for proper selection.



VM5-1



VM300

■ Stock items

## NF / AF contactors

### Wide band AC / DC Operated - with Screw Terminals

#### Description

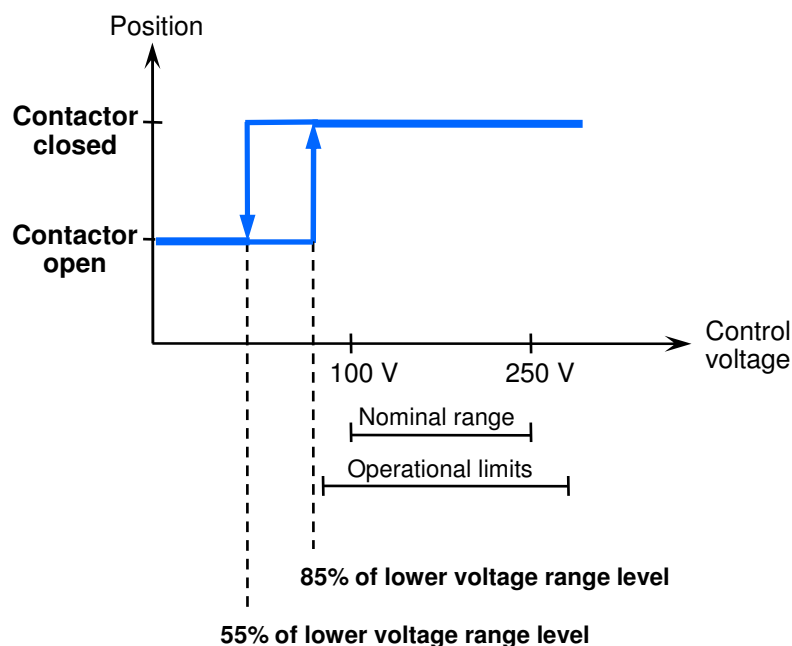
- **NF / AF contactor** include an electronic coil interface accepting a wide control voltage  $U_c$  min. ...  $U_c$  max. only four coils cover control voltages between 24...500 V 50/60 Hz or 20...500 V DC
- **NF / AF contactor** can manage large control voltage variations. One coil (e.g. 100...250 V 50/60 Hz - DC) can be used for different control voltages used worldwide without any coil change.
- **NF...Z / AF...Z contactor** equipped with a Z coil type allow direct control by 24 V DC 500 mA PLC-output and obtain a reduced holding coil consumption.
- **NF / AF contactor** have built-in surge protection and do not require additional surge suppressors.

**Control contactors : Wide band AC/DC operated with low power consumption & inbuilt surge suppressor**  
for order code refer page no. 54



#### Innovative solution from ABB

- Electronically controlled coil
- Distinct drop out- and pick up value
- 20ms sags and dip immunity
- Fulfills SEMI - F47- 0200 surge suppressors.
- Specification for processing equipment regarding voltage drop immunity.



# 3 pole contactors AF range: Wide band AC / DC operated

NEW



AF contactors are built in with

- Universal coil operable on wide band AC / DC voltages ranging from 70% Uc min - 110% Uc max
- Surge Suppressors
- Low power consumption coil

| AC1duty<br>Amps                                | AC3 rating at 415V |      |      | Auxiliary Contacts |     | Type Code      | Order code      | L.P.(₹)  |
|------------------------------------------------|--------------------|------|------|--------------------|-----|----------------|-----------------|----------|
|                                                | Amps               | hP   | kW   |                    |     |                |                 |          |
| 25                                             | 9                  | 5.5  | 4    | 1NO                | -   | AF09-30-10-□□  | 1SBL137001R□□10 | 1,850    |
|                                                |                    |      |      | -                  | 1NC | AF09-30-01-□□  | 1SBL137001R□□01 | 1,850    |
| 28                                             | 12                 | 7.5  | 5.5  | 1NO                | -   | AF12-30-10-□□  | 1SBL157001R□□10 | 1,990    |
|                                                |                    |      |      | -                  | 1NC | AF12-30-01-□□  | 1SBL157001R□□01 | 1,990    |
| 30                                             | 18                 | 12.5 | 7.5  | 1NO                | -   | AF16-30-10-□□  | 1SBL177001R□□10 | 2,450    |
|                                                |                    |      |      | -                  | 1NC | AF16-30-01-□□  | 1SBL177001R□□01 | 2,450    |
| 45                                             | 26                 | 15   | 11   | -                  | -   | AF26-30-00-□□  | 1SBL237001R□□00 | 3,270    |
| 50                                             | 32                 | 20   | 18   | -                  | -   | AF30-30-00-□□  | 1SBL277001R□□00 | 6,900    |
| 50                                             | 38                 | 25   | 18.5 | -                  | -   | AF38-30-00-□□  | 1SBL297001R□□00 | 7,800    |
| 70                                             | 40                 | 30   | 18.5 | -                  | -   | AF40-30-00-□□  | 1SBL347001R□□00 | 8,600    |
| 100                                            | 53                 | 40   | 22   | -                  | -   | AF52-30-00-□□  | 1SBL367001R□□00 | 10,900   |
| 105                                            | 65                 | 50   | 30   | -                  | -   | AF65-30-00-□□  | 1SBL387001R□□00 | 13,000   |
| 125                                            | 80                 | 60   | 37   | -                  | -   | AF80-30-00-□□  | 1SBL397001R□□00 | 15,500   |
| 130                                            | 96                 | 70   | 45   | -                  | -   | AF96-30-00-□□  | 1SBL407001R□□00 | 19,000   |
| 160                                            | 116                | 75   | 55   | 1NO                | 1NC | AF116-30-11-□□ | 1SFL427001R□□11 | 20,300   |
| 200                                            | 140                | 100  | 75   | 1NO                | 1NC | AF140-30-11-□□ | 1SFL447001R□□11 | 25,750   |
| 225                                            | 146                | 100  | 75   | 1NO                | 1NC | AF146-30-11-□□ | 1SFL467001R□□11 | 27,000   |
| 275                                            | 490                | 120  | 90   | 1NO                | 1NC | AF190-30-11-□□ | 1SFL487002R□□11 | 31,400   |
| 350                                            | 205                | 150  | 110  | 1NO                | 1NC | AF205-30-11-□□ | 1SFL527002R□□11 | 31,750   |
| 400                                            | 265                | 175  | 140  | 1NO                | 1NC | AF265-30-11-□□ | 1SFL547002R□□11 | 37,500   |
| 500                                            | 305                | 215  | 160  | 1NO                | 1NC | AF305-30-11-□□ | 1SFL587002R□□11 | 43,500   |
| 600                                            | 370                | 270  | 200  | 1NO                | 1NC | AF370-30-11-□□ | 1SFL607002R□□11 | 55,450   |
| For AF400...AF750 refer Table B for coil codes |                    |      |      |                    |     |                |                 |          |
| 600                                            | 400                | 300  | 220  | 1NO                | 1NC | AF400-30-11**  | 1SFL577001R□□11 | 59,000   |
| 700                                            | 460                | 340  | 250  | 1NO                | 1NC | AF460-30-11**  | 1SFL597001R□□11 | 74,000   |
| 800                                            | 580                | 470  | 355  | 1NO                | 1NC | AF580-30-11**  | 1SFL617001R□□11 | 103,300  |
| 1050                                           | 750                | 570  | 425  | 1NO                | 1NC | AF750-30-11**  | 1SFL637001R□□11 | 1,57,500 |

## Coil voltages and codes: New AF09...AF370 range (AC/DC operated)

| Voltage<br>V 50/60 Hz | Voltage<br>V DC | Code<br>□□ |
|-----------------------|-----------------|------------|
| 24...60               | 20...60         | 1 1        |
| 48...130              | 48...130        | 1 2        |
| 100...250             | 100...250       | 1 3        |
| 250...500             | 250...500       | 1 4        |

## AF400 and above range (AC/DC operated)

| Voltage<br>V 50/60 Hz | Voltage<br>V DC | Code<br>□□ |
|-----------------------|-----------------|------------|
| -                     | 24...60         | 6 8        |
| 48...130              | 48...130        | 6 9        |
| 100...250             | 100...250       | 7 0        |
| 250...500             | 250...500       | 7 1        |

## Old AF range contactor

| AC1duty<br>Amps | AC3 rating at 415V |     |     | Auxiliary Contacts |     | Type Code     | Order code      | L.P.(₹)      |
|-----------------|--------------------|-----|-----|--------------------|-----|---------------|-----------------|--------------|
|                 | Amps               | hP  | kW  |                    |     |               |                 |              |
| 100             | 50                 | 34  | 25  | -                  | -   | AF50-30-00 ** | 1SBL357001R□□00 | Upon request |
| 115             | 65                 | 50  | 37  | -                  | -   | AF63-30-00 ** | 1SBL377001R□□00 |              |
| 125             | 75                 | 54  | 40  | -                  | -   | AF75-30-00 ** | 1SBL417001R□□00 |              |
| 145             | 96                 | 60  | 55  | 1NO                | 1NC | AF95-30-11**  | 1SFL437001R□□11 |              |
| 160             | 110                | 75  | 59  | 1NO                | 1NC | AF110-30-11** | 1SFL457001R□□11 |              |
| 250             | 145                | 80  | 75  | 1NO                | 1NC | AF145-30-11** | 1SFL477001R□□11 |              |
| 275             | 185                | 100 | 90  | 1NO                | 1NC | AF185-30-11** | 1SFL497001R□□11 |              |
| 350             | 210                | 150 | 110 | 1NO                | 1NC | AF210-30-11** | 1SFL517001R□□11 |              |
| 400             | 260                | 200 | 140 | 1NO                | 1NC | AF260-30-11** | 1SFL537001R□□11 |              |
| 500             | 300                | 250 | 160 | 1NO                | 1NC | AF300-30-11** | 1SFL557001R□□11 |              |

## Coil voltages and codes: Old AF range (AC/DC operated)

| Voltage<br>V 50/60 Hz | Voltage<br>V DC | Code<br>□□ |
|-----------------------|-----------------|------------|
| 48...130              | 48...130        | 6 9        |
| 100...250             | 100...250       | 7 0        |
| -                     | 24...60         | 72*        |

\*Only for AF50, AF 63, AF75



# 4 pole contactors: Wide band AC / DC operated

## New AF Contactors: 4 pole – AC / DC Operated

NEW

| Rating at 415V<br>AC1 Amps | Main Contact Arrangement |     | Auxiliary Contacts |   |   | Type Code Reference | Order code       | L.P.(₹) |
|----------------------------|--------------------------|-----|--------------------|---|---|---------------------|------------------|---------|
| 25                         | 4NO                      | -   | -                  | - | - | AF09-40-00-□□       | 1SBL137201R□□□00 | 2,300   |
|                            | 2NO                      | 2NC | -                  | - | - | AF09-22-00-□□       | 1SBL137501R□□□00 | 2,900   |
| 30                         | 4NO                      | -   | -                  | - | - | AF16-40-00-□□       | 1SBL177201R□□□00 | 2,700   |
|                            | 2NO                      | 2NC | -                  | - | - | AF16-22-00-□□       | 1SBL177501R□□□00 | 3,550   |
| 45                         | 4NO                      | -   | -                  | - | - | AF26-40-00-□□       | 1SBL237201R□□□00 | 4,400   |
|                            | 2NO                      | 2NC | -                  | - | - | AF26-22-00-□□       | 1SBL237501R□□□00 | 5,400   |
| 55                         | 4NO                      | -   | -                  | - | - | AF38-40-00-□□       | 1SBL297201R□□□00 | 8,540   |
|                            | 2NO                      | 2NC | -                  | - | - | AF38-22-00-□□       | 1SBL297501R□□□00 | 10,570  |
| 70                         | 4NO                      | -   | -                  | - | - | AF40-40-00-□□       | 1SBL347201R□□□00 | 13,180  |
|                            | 2NO                      | 2NC | -                  | - | - | AF40-22-00-□□       | 1SBL347501R□□□00 | 14,200  |
| 100                        | 4NO                      | -   | -                  | - | - | AF52-40-00-□□       | 1SBL367201R□□□00 | 14,700  |
| 125                        | 4NO                      | -   | -                  | - | - | AF80-40-00-□□       | 1SBL397201R□□□00 | 17,550  |
|                            | 2NO                      | 2NC | -                  | - | - | AF80-22-00-□□       | 1SBL397501R□□□00 | 20,550  |
| 160                        | 4NO                      | -   | -                  | - | - | AF116-40-00-□□      | 1SFL427102R□□□00 | 20,500  |
| 200                        | 4NO                      | -   | -                  | - | - | AF140-40-00-□□      | 1SFL447102R□□□00 | 25,000  |
| 275                        | 4NO                      | -   | -                  | - | - | AF190-40-00-□□      | 1SFL487102R□□□00 | 35,000  |
| 350                        | 4NO                      | -   | -                  | - | - | AF205-40-00-□□      | 1SFL527102R□□□00 | 41,000  |
| 400                        | 4NO                      | -   | -                  | - | - | AF265-40-00-□□      | 1SFL547102R□□□00 | 48,720  |
| 500                        | 4NO                      | -   | -                  | - | - | AF305-40-00-□□      | 1SFL587102R□□□00 | 60,000  |
| 525                        | 4NO                      | -   | -                  | - | - | AF370-40-00-□□      | 1SFL607102R□□□00 | 72,000  |

## Coil voltages and codes: New AF range (AC/DC operated)

| Voltage<br>V 50/60 Hz | Voltage<br>V DC | Code<br>□□ |
|-----------------------|-----------------|------------|
| 24...60               | 20...60         | 1 1        |
| 48...130              | 48...130        | 1 2        |
| 100...250             | 100...250       | 1 3        |
| 250...500             | 250...500       | 1 4        |

## Old AF Contactors: 4 pole – AC / DC Operated

| Rating at 415V<br>AC1 Amps | Main Contact Arrangement |     | Auxiliary Contacts |   |   | Type Code Reference | Order code       | L.P.(₹)      |
|----------------------------|--------------------------|-----|--------------------|---|---|---------------------|------------------|--------------|
| 70                         | 4NO                      | -   | -                  | - | - | AF45-40-00          | 1SBL337201R□□□00 | Upon request |
|                            | 2NO                      | 2NC | -                  | - | - | AF45-22-00          | 1SBL337501R□□□00 |              |
| 125                        | 4NO                      | -   | -                  | - | - | AF75-40-00          | 1SBL417201R□□□00 |              |
|                            | 2NO                      | 2NC | -                  | - | - | AF75-22-00          | 1SBL427501R□□□00 |              |

## Coil voltages and codes: AF45... AF75

| Voltage<br>V - 50/60Hz | Voltage<br>V d.c. | Code<br>□□        |
|------------------------|-------------------|-------------------|
| -                      | 20 ... 60         | 72 <sup>(1)</sup> |
| 48 ... 130             | 48 ... 130        | 69                |
| 100 ... 250            | 100 ... 250       | 70                |

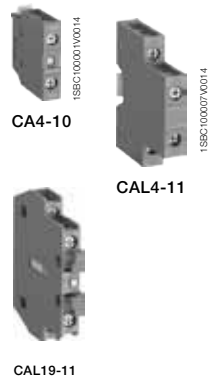
(1) The connection polarities indicated close to the coil terminals must be respected: A1 for the positive pole and A2 for the negative pole.

Note: For Non standard coil voltage, other than this contact us for price



# Accessories for AF contactors

NEW

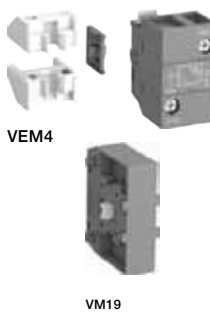


## Auxiliary contact block

| Description                        | Mounting on Contactors | Contact Configuration |     | Type Code Reference | Order Code      | L.P.(₹) |
|------------------------------------|------------------------|-----------------------|-----|---------------------|-----------------|---------|
|                                    |                        | NO                    | NC  |                     |                 |         |
| Front mounted 1 pole add-on blocks | AF09...AF96 / NF       | 1NO                   | -   | CA4-10              | 1SBN010110R1010 | 200     |
|                                    |                        | -                     | 1NC | CA4-01              | 1SBN010110R1001 | 200     |
| Front mounted 4 pole add-on blocks | AF09...AF38 / NF       | 4NO                   | -   | CA4-40E             | 1SBN010140R1040 | 830     |
|                                    |                        | 3NO                   | 1NC | CA4-31E             | 1SBN010140R1031 | 830     |
|                                    |                        | 2NO                   | 2NC | CA4-22E             | 1SBN010140R1022 | 830     |
|                                    |                        | -                     | 4NC | CA4-04E             | 1SBN010140R1004 | 830     |
| Side mounted 2 pole add-on blocks  | AF96...AF370           | 1NO                   | 1NC | CAL19-11            | 1SBN010820R1011 | 650     |
|                                    | AF09...AF96 / NF       | 1NO                   | 1NC | CAL19-11B           | 1SBN010820R3311 | 650     |
|                                    |                        | 1NO                   | 1NC | CAL4-11             | 1SBN010120R1011 | 570     |

\* Refer technical catalogue for proper selection.

## Mechanical interlocks



| Description                                  | For contactor types              | Type Code reference | Order Code      | L.P.(₹) |
|----------------------------------------------|----------------------------------|---------------------|-----------------|---------|
| Horizontal Mechanical Interlock              | AF09...AF38                      | VM 4                | 1SBN030105T1000 | 560     |
| Horizontal Mechanical & Electrical Interlock | AF09...AF38                      | VEM 4               | 1SBN030111R1000 | 980     |
| Horizontal Mechanical Interlock              | AF40...AF96                      | VM96-4              | 1SBN033405T1000 | 2,000   |
| Horizontal Mechanical Interlock              | AF116...AF146 and AF190, AF205   | VM140/190           | 1SBN034403R1000 | 2,900   |
| Horizontal Mechanical Interlock              | AF190, AF205 and AF265 ... AF370 | VM205/265           | 1SBN035203R1000 | 2,900   |
| Horizontal Mechanical Interlock              | AF116...AF370                    | VM19                | 1SBN030300R1000 | 3,000   |

Note: Refer technical catalogue for proper selection.

## Mechanical latching units

### Ordering Details



| For contactors | Rated control circuit voltage Uc |           | Type   | Order code      | L.P.(₹) |
|----------------|----------------------------------|-----------|--------|-----------------|---------|
| AF09-AF65, NF  | V 50 Hz or DC                    | V 60 Hz   |        |                 |         |
|                | 24                               | 24...28   | WB75-A | FPTN372726R1001 | 5,300   |
|                | 220...230                        | 220...255 | WB75-A | FPTN372726R1006 | 5,300   |

## Electronic timers

| For contactor types | Time delay range selected by switch | Delay type | Auxiliary contacts | Type     | Order Code      | L.P.(₹)      |  |
|---------------------|-------------------------------------|------------|--------------------|----------|-----------------|--------------|--|
| AF09 ... AF96       | 0.1...1 s                           | ON-delay   | 1NO + 1NC          | TEF4-ON  | 1SBN020112R1000 | Upon request |  |
|                     | 1...10 s                            | OFF-delay  | 1NO + 1NC          | TEF4-OFF | 1SBN020114R1000 |              |  |
|                     | 10...100 s                          |            |                    |          |                 |              |  |

Note: Rated control circuit voltage Uc 24...240 V 50/60 Hz or DC.

## Connecting links with manual motor starters

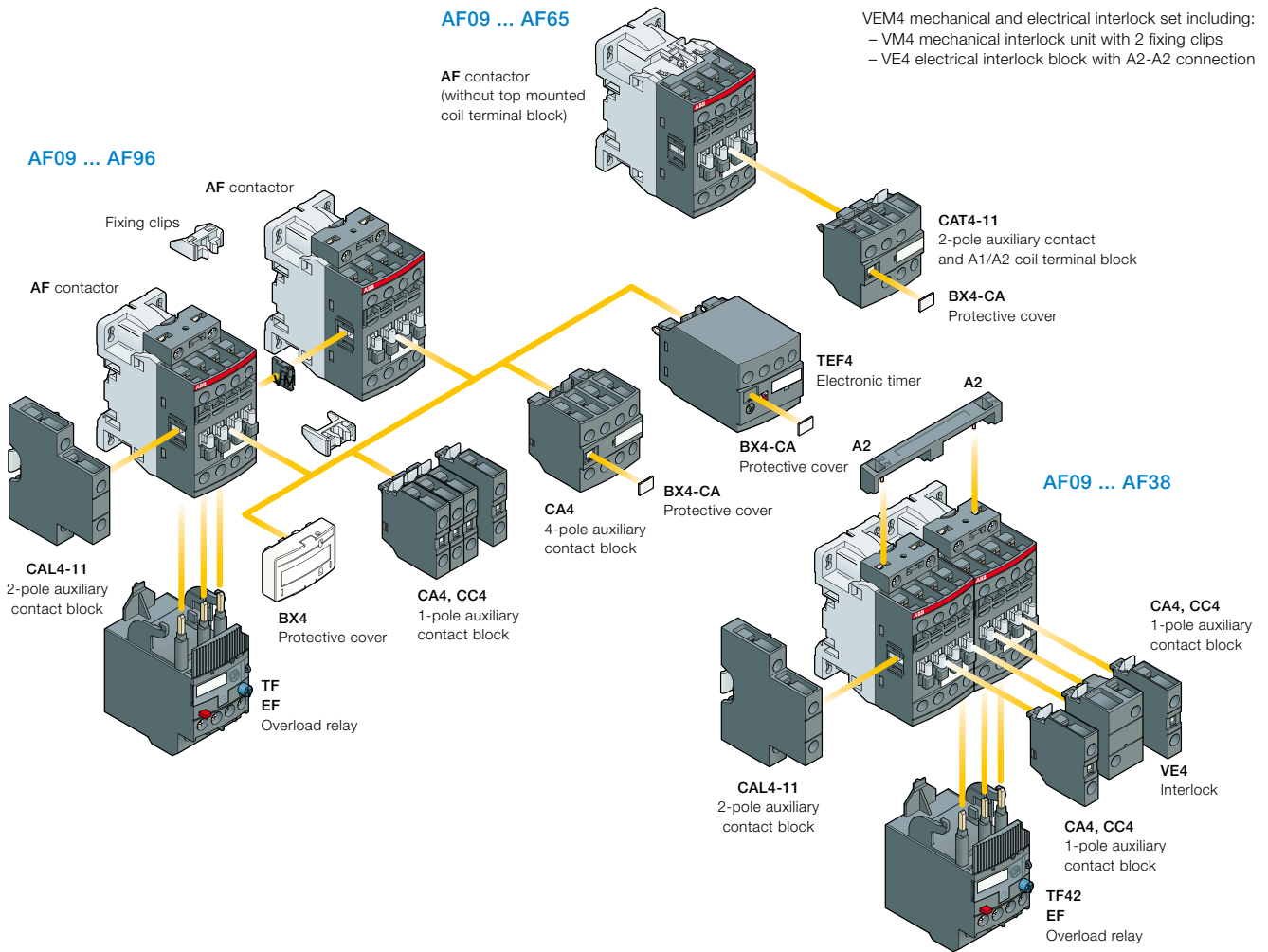
| For contactor types | Used with                                        | Type    | Order Code      | L.P.(₹) |
|---------------------|--------------------------------------------------|---------|-----------------|---------|
| AF09 ... AF16       | MS116-0.16 ... MS116-25, MS132-0.16 ... MS132-25 | BEA16-4 | 1SBN081306T1000 | 380     |
| AF26 ... AF30       | MS116-0.16 ... MS116-16, MS132-0.16 ... MS132-10 | BEA26-4 | 1SBN082306T1000 | 430     |
|                     | MS116-20 ... MS116-32, MS132-12 ... MS132-32     | BEA38-4 | 1SBN082306T2000 | 450     |

## Connection sets for reversing contactors

| For contactor types | Type    | Order Code      | L.P.(₹) |
|---------------------|---------|-----------------|---------|
| AF09 ... AF16       | BER16-4 | 1SBN081311R1000 | 950     |
| AF26 ... AF30       | BER38-4 | 1SBN082311R1000 | 1,280   |
| AF40 ... AF65       | BER65-4 | 1SBN083411R1000 | 1,550   |
| AF80 ... AF96       | BER96-4 | 1SBN083911R1000 | 2,700   |

## Connection sets for star-delta starting

| For contactor types | Type    | Order Code     | L.P.(₹) |
|---------------------|---------|----------------|---------|
| AF09 ... AF16       | BEY16-4 | 1SBN81313R2000 | 1,280   |
| AF26 ... AF30       | BEY38-4 | 1SBN82713R2000 | 2,000   |
| AF40 ... AF65       | BEY65-4 | 1SBN83413R2000 | 2,575   |
| AF80 ... AF96       | BEY96-4 | 1SBN83913R2000 | 3,300   |



## AF the premium range



### The AF contactor is compact

The AF contactor is compact in size and has had its width reduced by up to 30% thanks to an 80% reduction of the coil's energy consumption.

### The AF contactor is flexible

AF09...AF370 is perfect for motor starting applications and for solutions where space is limited. Interlocked reversing pairs require no spacing between contactors meaning you can fit more functionality into cabinets or other small enclosures.

# Installation contactors



| EN/ESB20                                             | EN/ESB24 | EN/ESB40 | EN/ESB63 |
|------------------------------------------------------|----------|----------|----------|
| <b>Switching heaters and resistors, AC-1 / AC-7a</b> |          |          |          |
| Rated operational current I <sub>g</sub> (NO)        |          |          |          |
| 20 A                                                 | 24 A     | 40 A     | 63 A     |
| Rated operational current I <sub>g</sub> (NC)        |          |          |          |
| 20 A                                                 | 24 A     | 30 A     | 30 A     |
| Rated operational power, 1-phase at 230 V            |          |          |          |
| 4 kW                                                 | 5.3 kW   | 8.8 kW   | 13.8 kW  |
| Rated operational power, 3-phase at 400 V            |          |          |          |
|                                                      | 16 kW    | 26 kW    | 41 kW    |
| <b>Switching motors, AC-3 / AC-7b</b>                |          |          |          |
| Rated operational current I <sub>g</sub> (NO)        |          |          |          |
| 9 A                                                  | 9 A      | 22 A     | 30 A     |
| Rated operational current I <sub>g</sub> (NC)        |          |          |          |
| 9 A                                                  | 6 A      |          |          |
| Rated operational power, 1-phase at 230 V            |          |          |          |
| 1.3 kW                                               | 2.2 kW   | 5.5 kW   | 8 kW     |
| Rated operational power, 3-phase at 400 V            |          |          |          |
|                                                      | 4 kW     | 11 kW    | 15 kW    |
| <b>Module width</b>                                  |          |          |          |
| 18 mm                                                | 36 mm    | 54 mm    | 54 mm    |

## EN-Types - with benefits for service

EN-Types have an integrated 3-position switch for manual and automatic operation.

| Contacts                                          | Type                      | Order No.       | L.P.(₹) |
|---------------------------------------------------|---------------------------|-----------------|---------|
| 20 A 2-pole (No aux.-contact block possible)      |                           |                 |         |
| 2NO                                               | ESB 20-20 24 V 50/60 Hz   | GHE3211102R0001 | 2,750   |
| 2NO                                               | ESB 20-20 230 V 50/60 Hz  | GHE3211102R0006 | 2,750   |
| 2NC                                               | ESB 20-02 24 V 50/60 Hz   | GHE3211202R0001 | 2,900   |
| 2NC                                               | ESB 20-02 230 V 50/60 Hz  | GHE3211202R0006 | 2,900   |
| 1NO, 1NC                                          | ESB 20-11 24 V 50/60 Hz   | GHE3211302R0001 | 2,800   |
| 1NO, 1NC                                          | ESB 20-11 230 V 50/60 Hz  | GHE3211302R0006 | 2,800   |
| 24 A 2-pole (1 aux.-contact block possible)       |                           |                 |         |
| 2NO                                               | ESB 24-20 24 V AC/DC      | GHE3291402R0006 | 3,000   |
| 2NO                                               | ESB 24-20 24 V AC/DC      | GHE3291402R0001 |         |
| 24 A 4-pole (1 aux.-contact block possible)       |                           |                 |         |
| 4NO                                               | ESB 24-40 24 V AC/DC      | GHE3291102R0001 | 3,000   |
| 4NO                                               | ESB 24-40 230-240 V AC/DC | GHE3291102R0006 |         |
| 2NO, 2NC                                          | ESB 24-22 24 V AC/DC      | GHE3291302R0001 |         |
| 2NO, 2NC                                          | ESB 24-22 230-240 V AC/DC | GHE3291302R0006 |         |
| 40 A 2-/3-/4-pole (1 aux.-contact block possible) |                           |                 |         |
| 2NO                                               | ESB 40-20 24 V AC/DC      | GHE3491402R0001 | 4,800   |
| 2NO                                               | ESB 40-20 230 V AC/DC     | GHE3491402R0006 | 4,800   |
| 3NO                                               | ESB 40-30 24 V AC/DC      | GHE3491502R0001 | 5,050   |
| 3NO                                               | ESB 40-30 230 V AC/DC     | GHE3491502R0006 | 5,050   |
| 4NO                                               | ESB 40-40 24 V AC/DC      | GHE3491102R0001 | 5,400   |
| 4NO                                               | ESB 40-40 230 V AC/DC     | GHE3491102R0006 | 5,400   |
| 2NO, 2NC                                          | ESB 40-22 24 V AC/DC      | GHE3491302R0001 | 5,500   |
| 2NO, 2NC                                          | ESB 40-22 230 V AC/DC     | GHE3491302R0006 | 5,500   |
| 63 A 2-/3-/4-pole (1 aux.-contact block possible) |                           |                 |         |
| 2NO                                               | ESB 63-20 24 V AC/DC      | GHE3691402R0001 | 6,150   |
| 2NO                                               | ESB 63-20 230 V AC/DC     | GHE3691402R0006 | 6,150   |
| 3NO                                               | ESB 63-30 230 V AC/DC     | GHE3691502R0006 | 6,150   |
| 4NO                                               | ESB 63-40 24 V AC/DC      | GHE3691102R0001 | 7,200   |
| 4NO                                               | ESB 63-40 230 V AC/DC     | GHE3691102R0006 | 7,200   |

## Functions:

- Switch in position “AUTO” : standard control
- Switch in position “O” : Supply to coil interrupted
- Switch in position “I” : Manually switched on (a trigger signal at the coil terminal initiates the switch moving into “AUTO” position)

| Contacts                                       | Type                         | Order No.       | L.P.(₹)      |
|------------------------------------------------|------------------------------|-----------------|--------------|
| 20 A 2-pole ( No aux.-contact block possible ) |                              |                 |              |
| 2NO                                            | EN 20-20 24 V 50 Hz          | GHE3221101R0001 | Upon request |
| 2NO                                            | EN 20-20 230 V 50 Hz         | GHE3221101R0006 |              |
| 24 A 3-pole ( 1 aux.-contact block possible )  |                              |                 |              |
| 3NO                                            | EN 24-30 230-240 V AC/DC     | GHE3261501R0006 | Upon request |
| 24 A 4-pole ( 1 aux.-contact block possible )  |                              |                 |              |
| 4NO                                            | EN 24-40 24 V AC/DC          | GHE3261101R0001 | Upon request |
| 4NO                                            | EN 24-40 230-240 V AC/DC     | GHE3261101R0006 |              |
| 40 A 3-pole ( 1 aux.-contact block possible )  |                              |                 |              |
| 3NO                                            | EN 40-30 230 V AC/DC         | GHE3421501R0006 | Upon request |
| 40 A 4-pole ( 1 aux.-contact block possible )  |                              |                 |              |
| 4NO                                            | EN 40-40 24 V AC/DC          | GHE3421101R0001 | Upon request |
| 4NO                                            | EN 40-40 230 V AC/DC         | GHE3421101R0006 |              |
| Accessories                                    |                              |                 |              |
| 2NO                                            | EH 04-20, Aux.-contact block | GHE3401321R0001 | Upon request |
| 1NO, 1NC                                       | EH 04-11, Aux.-contact block | GHE3401321R0002 |              |
| distance pcs                                   | ESB-DIS Spacer               | GHE3201902R0001 |              |
| Seal                                           | ESBPI K24                    | GHE3201903R0001 |              |



# Mini contactors



## Mini contactors with screw connection: 3 pole - AC operated

| AC1 duty Amps | AC3 rating at 415V |     |     | Auxiliary Contacts |     | Type Code Reference | Order Code      | L.P.(₹) |
|---------------|--------------------|-----|-----|--------------------|-----|---------------------|-----------------|---------|
|               | Amps               | hP  | kW  |                    |     |                     |                 |         |
| 16A           | 9                  | 5.5 | 4   | 1NO                | -   | B06-30-10 **        | GJ 1211001R□10□ | 960     |
| 16A           | 9                  | 5.5 | 4   | -                  | 1NC | B06-30-01 **        | GJL1211001R□01□ |         |
| 20A           | 12                 | 7.5 | 5.5 | 1NO                | -   | B07-30-10 **        | GJL1311001R□10□ | 1,050   |
| 20A           | 12                 | 7.5 | 5.5 | -                  | 1NC | B07-30-01 **        | GJL1311001R□01□ |         |

Complete the contactor type code by replacing \*\* with desired coil voltage

## Mini contactors with screw connection: 3 pole - DC operated

| AC1 duty Amps | AC3 rating at 415V |     |     | Auxiliary Contacts |     | Type Code Reference | Order Code      | L.P.(₹) |
|---------------|--------------------|-----|-----|--------------------|-----|---------------------|-----------------|---------|
|               | Amps               | hP  | kW  |                    |     |                     |                 |         |
| 16A           | 9                  | 5.5 | 4   | 1NO                | -   | BC6-30-10 **        | GJL1213001R□10□ | 1,350   |
| 16A           | 9                  | 5.5 | 4   | -                  | 1NC | BC6-30-01 **        | GJL1213001R□01□ |         |
| 20A           | 12                 | 7.5 | 5.5 | 1NO                | -   | BC7-30-10 **        | GJL1313001R□10□ | 1,400   |
| 20A           | 12                 | 7.5 | 5.5 | -                  | 1NC | BC7-30-01 **        | GJL1313001R□01□ |         |

## Mini reversing contactors with screw connection: 3 pole - AC operated

| AC1 duty Amps | AC3 rating at 415V |     |     | Auxiliary Contacts |     | Type Code Reference | Order Code      | L.P.(₹) |
|---------------|--------------------|-----|-----|--------------------|-----|---------------------|-----------------|---------|
|               | Amps               | hP  | kW  |                    |     |                     |                 |         |
| 16A           | 9                  | 5.5 | 4   | 1NO                | -   | VB06-30-10 **       | GJ 1211901R□10□ | 2,800   |
| 16A           | 9                  | 5.5 | 4   | -                  | 1NC | VB06-30-01 **       | GJL1211901R□01□ | 2,800   |
| 20A           | 12                 | 7.5 | 5.5 | 1NO                | -   | VB07-30-10 **       | GJL1311901R□10□ | 2,950   |
| 20A           | 12                 | 7.5 | 5.5 | -                  | 1NC | VB07-30-01 **       | GJL1311901R□01□ | 2,950   |

Complete the contactor type code by replacing \*\* with desired coil voltage

## Mini reversing contactors with screw connection: 3 pole - DC operated

| AC1 duty Amps | AC3 rating at 415V |     |     | Auxiliary Contacts |     | Type Code Reference | Order Code      | L.P.(₹) |
|---------------|--------------------|-----|-----|--------------------|-----|---------------------|-----------------|---------|
|               | Amps               | hP  | kW  |                    |     |                     |                 |         |
| 16A           | 9                  | 5.5 | 4   | 1NO                | -   | VBC6-30-10 **       | GJL1213901R□10□ | 2,400   |
| 16A           | 9                  | 5.5 | 4   | -                  | 1NC | VBC6-30-01 **       | GJL1213901R□01□ | 2,400   |
| 20A           | 12                 | 7.5 | 5.5 | 1NO                | -   | VBC7-30-10 **       | GJL1313901R□10□ | 3,200   |
| 20A           | 12                 | 7.5 | 5.5 | -                  | 1NC | VBC7-30-01 **       | GJL1313901R□01□ | 3,200   |

Complete the contactor type code by replacing \*\* with desired coil voltage

Mini contactors are also available in 4 pole (4NO / 2NO + 2NC)

## Mini auxiliary contactor 4 pole with screw connection

| Control Circuit | Contact Configuration |     | Type Code Reference | Order Code         | L.P.(₹) |
|-----------------|-----------------------|-----|---------------------|--------------------|---------|
|                 | NO                    | NC  |                     |                    |         |
| AC              | 2NO                   | 2NC | K6-22Z**            | GJH 121 1001 R□22□ | 1,075   |
|                 | 3NO                   | 1NC | K6-31Z **           | GJH 121 1001 R□31□ |         |
|                 | 4NO                   | -   | K6-40E **           | GJH 121 1001 R□40□ |         |
| DC              | 2NO                   | 2NC | KC6-22Z**           | GJH 121 3001 R□22□ | 1,350   |
|                 | 3NO                   | 1NC | KC6-31Z **          | GJH 121 3001 R□31□ |         |
|                 | 4NO                   | -   | KC6-40E **          | GJH 121 3001 R□40□ |         |

## Coil voltage for mini contactors

| AC          |         | DC          |         |
|-------------|---------|-------------|---------|
| 50-60Hz     | Code    | DC V        | Code    |
| 24          | 0 ... 1 | 24          | 0 ... 1 |
| 48          | 0 ... 3 | 110 ... 125 | 0 ... 4 |
| 110 ... 127 | 8 ... 4 | 220 ... 240 | 0 ... 5 |
| 220 ... 240 | 8 ... 0 |             |         |
| 380 ... 415 | 8 ... 5 |             |         |

Complete the contactor type code by replacing \*\* with desired coil voltage

## Auxiliary contact blocks for mini contactors, 4 A, 240 V AC-15 / 2.5 A, 24V DC-13

### Ordering details

| For contactor types                                     | Auxiliary contacts | Type     | Order Code      | LP(₹) |
|---------------------------------------------------------|--------------------|----------|-----------------|-------|
| Front mounted instantaneous auxiliary contact blocks 1) |                    |          |                 |       |
| B6-, B7-30-10, BC6-, BC7-30-10                          | 1NO + 1NC          | CAF6-11M | GJL1201330R0003 | 560   |
| VB6, VB7, VBC6, VBC7, VB6A, VB7A                        | 2NO                | CAF6-20M | GJL1201330R0007 |       |
| VBC6A, VBC7A                                            | 2NC                | CAF6-02M | GJL1201330R0011 |       |
| Side mounted instantaneous auxiliary contact block 1)   |                    |          |                 |       |
| B6-, B7-30-10, BC6-, BC7-30-10                          | 1NO + 1NC          | CA6-11M  | GJL1201317R0003 | 560   |

# Spares for contactors

## Spare coils for A range

| For contactor types         | Type Code Reference | Order Code        | L.P.(₹) |
|-----------------------------|---------------------|-------------------|---------|
| N, A9....A16, UA16..RA      | ZA16 **             | 1SBN151410R□□06 ■ | 750     |
| A26...A40;UA26...UA30 RA    | ZA40 **             | 1SBN152410R□□06 ■ | 860     |
| A45...A75;UA50...UA75 RA    | ZA75 **             | 1SBN153510R□□06 ■ | 2,550   |
| A95...A110; UA95...UA110 RA | ZA110 **            | 1SFN154310R□□06 ■ | 3,350   |
| A145...A185                 | ZA185 **            | 1SFN154710R□□06 ■ | 5,470   |
| A210...A300                 | ZA300 **            | 1SFN155110R□□06 ■ | 6,070   |

## Spare coils for AF range

| For contactor types | Type Code Reference | Order Code        | L.P.(₹) |
|---------------------|---------------------|-------------------|---------|
| AF45...AF75         | ZAF75               | 1SBN153570R□□06 ■ | 7,000   |
| AF95...AF110        | ZAF110              | 1SFN153370R□□06 ■ | 9,400   |
| AF145...AF185       | ZAF185              | 1SFN154770R□□06 ■ | 11,000  |
| AF210,AF260 &AF300  | ZAF300              | 1SFN155170R□□06   | 20,000  |
| AF400...AF460       | ZAF460**            | 1SFN155770R□□06   | 23,500  |
| AF580...AF750**     | ZAF750**            | 1SFN156170R□□06   | 30,500  |

## Coil voltages & codes

| N range, A09.....A300, UA....RA |                 |      | AF45...AF750       |               |      |
|---------------------------------|-----------------|------|--------------------|---------------|------|
| Voltage V-50 Hz                 | Voltage V-60 Hz | Code | Voltage V-50/60 Hz | Voltage V..dc | Code |
| 24                              | 24              | 81   |                    | 24....60      | 68   |
| 110                             | 110....120      | 84   | 48....130          | 48....130     | 69   |
| 220....230                      | 230....240      | 80   | 100....250         | 100....250    | 70   |
| 400....415                      | 415....440      | 86   | 250....500         | 250....500    | 71   |

## Spare contact sets for 3 pole

| Description                                                                                                           | For contactor types | Type Code Reference | Order Code        | L.P.(₹) |
|-----------------------------------------------------------------------------------------------------------------------|---------------------|---------------------|-------------------|---------|
| Contact set for 3 -pole contactors consisting of 6 fixed contacts, 3 moving contacts, springs and the required screws | A/AF/AE/TAE50       | ZL 50               | 1SBN163503R1000 ■ | 4,050   |
|                                                                                                                       | A/AF/AE/TAE63       | ZL 63               | 1SBN163703R1000 ■ | 5,650   |
|                                                                                                                       | A/AF/AE/TAE75       | ZL 75               | 1SBN164103R1000 ■ | 7,100   |
|                                                                                                                       | A/AF/AE/TAE95       | ZL 95               | 1SFN164303R1000 ■ | 9,350   |
|                                                                                                                       | A/AF/AE/TAE110      | ZL 110              | 1SFN164503R1000 ■ | 9,850   |
|                                                                                                                       | A/AF145             | ZL 145              | 1SFN164703R1000 ■ | 12,500  |
|                                                                                                                       | A/AF185             | ZL 185              | 1SFN164903R1000 ■ | 15,700  |
|                                                                                                                       | A/AF210             | ZL 210              | 1SFN165103R1000 ■ | 19,000  |
|                                                                                                                       | A/AF260             | ZL 260              | 1SFN165303R1000 ■ | 23,000  |
|                                                                                                                       | A/AF300             | ZL 300              | 1SFN165503R1000 ■ | 27,500  |
|                                                                                                                       | AF400               | ZL 400              | 1SFN165703R1000   | 33,000  |
|                                                                                                                       | AF460               | ZL 460              | 1SFN165903R1000   | 40,700  |
|                                                                                                                       | AF 580              | ZL 580              | 1SFN166103R1000   | 68,500  |
|                                                                                                                       | AF 750              | ZL 750              | 1SFN166303R1000   | 86,000  |
|                                                                                                                       | UA 50               | ZLU 50              | 1SBN163502R1000 ■ | 4,050   |
|                                                                                                                       | UA 63               | ZLU 63              | 1SBN163702R1000 ■ | 5,650   |
|                                                                                                                       | UA 75               | ZLU 75              | 1SBN164102R1000 ■ | 7,100   |

## Spare contact sets for 3 pole for AX

| For contactor types | Type Code Reference | Order Code      | L.P.(₹)      |
|---------------------|---------------------|-----------------|--------------|
| AX50                | ZLX50               | 1SBN163506R1000 | Upon Request |
| AX65                | ZLX65               | 1SBN163706R1000 |              |
| AX80                | ZLX80               | 1SBN164106R1000 |              |
| AX95                | ZLX95               | 1SFN164306R1000 |              |
| AX115               | ZLX115              | 1SFN169806R1000 |              |
| AX150               | ZLX150              | 1SFN169906R1000 |              |
| AX185               | ZLX185              | 1SFN164906R1000 |              |
| AX205               | ZLX205              | 1SFN165006R1000 |              |
| AX260               | ZLX260              | 1SFN165403R1000 |              |
| AX300               | ZLX300              | 1SFN165803R1000 |              |
| AX370               | ZLX370              | 1SFN166003R1000 |              |

## Spare coils for AX range

| For contactor types | Type Code Reference | Order Code      | L.P.(₹)      |
|---------------------|---------------------|-----------------|--------------|
| AX25                | ZAX25               | 1SBN158910R□□36 | Upon Request |
| AX40                | ZAX40               | 1SBN152810R□□36 |              |
| AX80                | ZAX80               | 1SBN153510R□□36 |              |
| AX150               | ZAX150              | 1SFN159910R□□36 |              |
| AX205               | ZAX205              | 1SFN155010R□□36 |              |
| AX370               | ZAX370              | 1SFN156010R□□36 |              |

Complete the contactor type code by replacing □□ with desired coil voltage from page no 66

# DOL and star delta starters

## Direct on line starter:

| Rating at 415V 50Hz |      | Back - up Fuse rating (A) | Type Code Reference | Order Code      | L.P.(₹) |
|---------------------|------|---------------------------|---------------------|-----------------|---------|
| HP                  | kW   |                           |                     |                 |         |
| 0.25                | 0.18 | 4A                        | MA-0.25 **          | 1SYN140318R8625 | 3,080   |
| 0.50                | 0.37 | 4A                        | MA-0.50 **          | 1SYN140318R8605 | 3,080   |
| 0.75                | 0.52 | 6A                        | MA-0.75 **          | 1SYN140318R8675 | 3,080   |
| 1.00                | 0.75 | 6A                        | MA-1.00 **          | 1SYN140318R8610 | 3,080   |
| 1.50                | 1.10 | 10A                       | MA-1.50 **          | 1SYN140318R8615 | 3,080   |
| 2.00                | 1.50 | 10A                       | MA-2.00 **          | 1SYN140318R8620 | 3,080   |
| 3.00                | 2.20 | 16A                       | MA-3.00 **          | 1SYN140318R8630 | 3,080   |
| 5.00                | 3.70 | 25A                       | MA-5.00 **          | 1SYN140318R8650 | 3,080   |
| 7.50                | 5.50 | 32A                       | MA-7.50 **          | 1SYN16018R86750 | 3,080   |
| 10.00               | 7.50 | 32A                       | MA-10.00 **         | 1SYN180318R8610 | 3,330   |

## Fully automatic Star Delta starter:

| HP rating at 415V | Type Code Reference | Order Code      | L.P.(₹) |
|-------------------|---------------------|-----------------|---------|
| 12.5              | SDA-12.5 **         | 1SYN184322R8600 | 11,500  |
| 15                | SDA-15 **           | 1SYN242322R8600 | 12,500  |
| 20                | SDA-20 **           | 1SYN244322R8600 | 14,500  |
| 25                | SDA-25 **           | 1SYN246322R8600 | 15,100  |
| 30                | SDA-30 **           | 1SYN282322R8600 | 18,250  |
| 35                | SDA-35 **           | 1SYN284322R8600 | 20,250  |
| 40                | SDA-40 **           | 1SYN322322R8600 | 24,575  |
| 50                | SDA-50 **           | 1SYN352342R8600 | 29,500  |
| 60                | SDA-60 **           | 1SYN372342R8600 | 37,950  |
| 75                | SDA-75 **           | 1SYN412342R8600 | 44,500  |

Complete the starter type code by replacing the \*\* with the desired coil voltage.

| Voltage                                                                             | Code                                                                                |
|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
|  |  |
| 220 ... 230 V coil                                                                  | 3 8                                                                                 |
| 400 ... 415 V coil                                                                  | 8 6                                                                                 |

## DOL Starter with IP65 enclosure



## 4KE 7.5KW 415V, IP65 compact plastic enclosure with double insulation



| Description                       | Order code      | L.P.(₹) |
|-----------------------------------|-----------------|---------|
| DRAS09-29P 4.0 kW 415V, 415V coil | 1SBK104035R2900 | 5400    |
| DRAS12-29P 5.5 kW 415V, 415V coil | 1SBK114035R2900 | 5800    |
| DRAS16-29P 7.5 kW 415V, 415V coil | 1SBK124035R2900 | 7800    |

Note: T16 OLR to be ordered separately. Plz refer page no. 82 for reference.

■ Stock items

# Thermal overload relays



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## TA25, TA42 and TA75 relays

| Relay range in Amps | Direct mounting on contactors                                           | Type Code reference | Order Code        | L.P.(₹) |
|---------------------|-------------------------------------------------------------------------|---------------------|-------------------|---------|
| 0.1 ... 0.16        | "A9...A40<br>AX9...AX32<br>AL9...AL40<br>TAL9...TAL40"                  | TA25DU 0.16M        | 1SAZ211201R2005   | 1,390   |
| 0.1 ... 0.16        |                                                                         | TA25DU 0.25M        | 1SAZ211201R2009   | 1,390   |
| 0.25 ... 0.4        |                                                                         | TA25DU 0.4M         | 1SAZ211201R2013   | 1,390   |
| 0.4 ... 0.63        |                                                                         | TA25DU 0.63M        | 1SAZ211201R2017   | 1,390   |
| 0.63 ... 1.0        |                                                                         | TA25DU 1.0M         | 1SAZ211201R2021   | 1,390   |
| 1.0 ... 1.4         |                                                                         | TA25DU 1.4M         | 1SAZ211201R2023 ■ | 1,390   |
| 1.3 ... 1.8         |                                                                         | TA25DU 1.8M         | 1SAZ211201R2025 ■ | 1,390   |
| 1.7 ... 2.4         |                                                                         | TA25DU 2.4M         | 1SAZ211201R2028 ■ | 1,390   |
| 2.2 ... 3.1         |                                                                         | TA25DU 3.1M         | 1SAZ211201R2031 ■ | 1,390   |
| 2.8 ... 4.0         |                                                                         | TA25DU 4.0M         | 1SAZ211201R2033 ■ | 1,390   |
| 3.5 ... 5.0         |                                                                         | TA25DU 5.0M         | 1SAZ211201R2035 ■ | 1,390   |
| 4.5 ... 6.5         |                                                                         | TA25DU 6.5M         | 1SAZ211201R2038 ■ | 1,390   |
| 6.0 ... 8.5         |                                                                         | TA25DU 8.5M         | 1SAZ211201R2040 ■ | 1,390   |
| 7.5 ... 11.0        |                                                                         | TA25DU 11M          | 1SAZ211201R2043 ■ | 1,390   |
| 10.0 ... 14.0       |                                                                         | TA25DU 14M          | 1SAZ211201R2045 ■ | 1,390   |
| 13.0 ... 19.0       |                                                                         | TA25DU 19M          | 1SAZ211201R2047 ■ | 1,720   |
| 18.0 ... 25.0       |                                                                         | TA25DU 25M          | 1SAZ211201R2051 ■ | 1,720   |
| 24.0 ... 32.0       |                                                                         | TA25DU 32M          | 1SAZ211201R2053 ■ | 2,400   |
| TA42DU              |                                                                         |                     |                   |         |
| 18.0 ... 25.0       | "A30,A40,<br>AX32...AX40<br>AL30,AL40,<br>TAL30,TAL 40"                 | TA42DU 25           | 1SAZ311201R2001   | 2,850   |
| 22.0 ... 32.0       |                                                                         | TA42DU 32           | 1SAZ311201R2002   | 3,110   |
| 29.0 ... 42.0       |                                                                         | TA42DU 42           | 1SAZ311201R2003   | 3,150   |
| TA75DU              |                                                                         |                     |                   |         |
| 22 ... 32           | A50...A75<br>AX50...AX80<br>AE50...AE75<br>TAE50...TAE75<br>AF50...AF75 | TA75DU 32           | 1SAZ321201R2002   | 3,600   |
| 29 ... 42           |                                                                         | TA75DU 42           | 1SAZ321201R2003 ■ | 4,220   |
| 36 ... 52           |                                                                         | TA75DU 52           | 1SAZ321201R2004 ■ | 4,220   |
| 45 ... 63           |                                                                         | TA75DU 63           | 1SAZ321201R2005 ■ | 4,220   |
| 60 ... 80           |                                                                         | TA75DU 80           | 1SAZ321201R2006   | 4,530   |
| TA80DU              |                                                                         |                     |                   |         |
| 36 ... 52           | A50...A75, AX50...AX80<br>AE50...AE75, TAE50...<br>TAE75, AF50...AF75   | TA80DU-52           | 1SAZ331201R1004   | 4,650   |
| 45 ... 63           |                                                                         | TA80DU-63           | 1SAZ331201R1005   | 4,650   |
| 60 ... 80           |                                                                         | TA80DU-80           | 1SAZ331201R1006   | 5,000   |

TA25/TA42/TA75/TA80/TA110/TA200 are direct operated relays with trip class 10A

## TA110DU

|            |                          |             |                 |       |
|------------|--------------------------|-------------|-----------------|-------|
| 66 ... 90  | A95...A110, AX95...AX150 | TA110DU-90  | 1SAZ411201R1001 | 8,500 |
| 80 ... 110 | AF95...AF110             | TA110DU-110 | 1SAZ411201R1002 | 9,300 |

## TA200DU

|             |                                                               |             |                 |        |
|-------------|---------------------------------------------------------------|-------------|-----------------|--------|
| 66 ... 90   | A145...A185<br>AX185...AX205<br>AF145...AF185<br>AF190, AF205 | TA200DU-90  | 1SAZ421201R1001 | 9,780  |
| 80 ... 110  |                                                               | TA200DU-110 | 1SAZ421201R1002 | 10,600 |
| 100 ... 135 |                                                               | TA200DU-135 | 1SAZ421201R1003 | 11,310 |
| 110 ... 150 |                                                               | TA200DU-150 | 1SAZ421201R1004 | 12,310 |
| 130 ... 175 |                                                               | TA200DU-175 | 1SAZ421201R1005 | 12,820 |
| 150 ... 200 |                                                               | TA200DU-200 | 1SAZ421201R1006 | 13,390 |

## Accessories

|                          |                        |         |                   |              |
|--------------------------|------------------------|---------|-------------------|--------------|
| Independent Mounting Kit | TA25DU0.16...25A       | DB25/25 | 1SAZ201108R0001 ■ | 310          |
|                          | TA25DU32               | DB25/32 | 1SAZ 201108R0002  | 650          |
|                          | TA42DU, TA75DU, TA80DU | DB80    | 1SAZ301110R0001   | Upon request |
|                          | TA110DU, TA200DU       | DB200   | 1SAZ401110R0001   |              |

■ Stock items

# Thermal overload relays

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TF42

## T16 Relays

| Relay range in Amps | Direct mounting on contactors                                          | Type Code reference | Order Code      | L.P.(₹)      |
|---------------------|------------------------------------------------------------------------|---------------------|-----------------|--------------|
| 0.10 ... 0.13       | B6/BC6<br>B7/BC7<br>VB6/VBC6<br>VB7/VBC7<br>AS/ASL<br>DOL Starter IP65 | T16-0.13            | 1SAZ711201R1005 | Upon Request |
| 0.13 ... 0.17       |                                                                        | T16-0.17            | 1SAZ711201R1008 |              |
| 0.17 ... 0.23       |                                                                        | T16-0.23            | 1SAZ711201R1009 |              |
| 0.23 ... 0.31       |                                                                        | T16-0.31            | 1SAZ711201R1013 |              |
| 0.31 ... 0.41       |                                                                        | T16-0.41            | 1SAZ711201R1014 |              |
| 0.41 ... 0.55       |                                                                        | T16-0.55            | 1SAZ711201R1017 |              |
| 0.55 ... 0.74       |                                                                        | T16-0.74            | 1SAZ711201R1021 |              |
| 0.74 ... 1.00       |                                                                        | T16-1.0             | 1SAZ711201R1023 |              |
| 1.00 ... 1.30       |                                                                        | T16-1.3             | 1SAZ711201R1025 |              |
| 1.30 ... 1.70       |                                                                        | T16-1.7             | 1SAZ711201R1028 |              |
| 1.70 ... 2.30       |                                                                        | T16-2.3             | 1SAZ711201R1031 |              |
| 2.30 ... 3.10       |                                                                        | T16-3.1             | 1SAZ711201R1033 |              |
| 3.10 ... 4.20       |                                                                        | T16-4.2             | 1SAZ711201R1035 |              |
| 4.20 ... 5.70       |                                                                        | T16-5.7             | 1SAZ711201R1038 |              |
| 5.70 ... 7.60       |                                                                        | T16-7.6             | 1SAZ711201R1040 |              |
| 7.60 ... 10.0       |                                                                        | T16-10              | 1SAZ711201R1043 |              |
| 10.0 ... 13.0       |                                                                        | T16-13              | 1SAZ711201R1045 |              |
| 13.0 ... 16.0       |                                                                        | T16-16              | 1SAZ711201R1047 |              |

## TF42 Relays

| Relay range in Amps | Direct mounting on contactors | Type Code reference | Order Code      | L.P.(₹)      |
|---------------------|-------------------------------|---------------------|-----------------|--------------|
| 0.10 ... 0.13       | AF09...AF38                   | TF42-0.13           | 1SAZ721201R1005 | Upon Request |
| 0.13 ... 0.17       |                               | TF42-0.17           | 1SAZ721201R1008 |              |
| 0.17 ... 0.23       |                               | TF42-0.23           | 1SAZ721201R1009 |              |
| 0.23 ... 0.31       |                               | TF42-0.31           | 1SAZ721201R1013 |              |
| 0.31 ... 0.41       |                               | TF42-0.41           | 1SAZ721201R1014 |              |
| 0.41 ... 0.55       |                               | TF42-0.55           | 1SAZ721201R1017 |              |
| 0.55 ... 0.74       |                               | TF42-0.74           | 1SAZ721201R1021 |              |
| 0.74 ... 1.00       |                               | TF42-1.0            | 1SAZ721201R1023 |              |
| 1.00 ... 1.30       |                               | TF42-1.3            | 1SAZ721201R1025 |              |
| 1.30 ... 1.70       |                               | TF42-1.7            | 1SAZ721201R1028 |              |
| 1.70 ... 2.30       |                               | TF42-2.3            | 1SAZ721201R1031 |              |
| 2.30 ... 3.10       |                               | TF42-3.1            | 1SAZ721201R1033 |              |
| 3.10 ... 4.20       |                               | TF42-4.2            | 1SAZ721201R1035 |              |
| 4.20 ... 5.70       |                               | TF42-5.7            | 1SAZ721201R1038 |              |
| 5.70 ... 7.60       |                               | TF42-7.6            | 1SAZ721201R1040 |              |
| 7.60 ... 10.0       |                               | TF42-10             | 1SAZ721201R1043 |              |
| 10.0 ... 13.0       |                               | TF42-13             | 1SAZ721201R1045 |              |
| 13.0 ... 16.0       |                               | TF42-16             | 1SAZ721201R1047 |              |
| 16.0 ... 20.0       |                               | TF42-20             | 1SAZ721201R1049 |              |
| 20.0 ... 24.0       |                               | TF42-24             | 1SAZ721201R1051 |              |
| 24.0 ... 29.0       |                               | TF42-29             | 1SAZ721201R1052 |              |
| 29.0 ... 35.0       |                               | TF42-35             | 1SAZ721201R1053 |              |
| 35.0 ... 38.0/40.0  |                               | TF42-38             | 1SAZ721201R1055 |              |





## Thermal overload relays

### TF42 Relays

| Relay range in Amps | Direct mounting on contactors | Type Code reference | Order Code      | LR(5)        |
|---------------------|-------------------------------|---------------------|-----------------|--------------|
| 22.0...25.0         | AF40, AF52, AF65              | TF65-25             | 15A2511201R1001 | Upon Request |
| 25.0...33.0         |                               | TF65-33             | 15A2511201R1002 |              |
| 30.0...40.0         |                               | TF65-40             | 15A2511201R1003 |              |
| 35.0...47.0         |                               | TF65-47             | 15A2511201R1004 |              |
| 44.0...53.0         |                               | TF65-53             | 15A2511201R1005 |              |
| 50.0...60.0         |                               | TF65-60             | 15A2511201R1006 |              |
| 57.0...67.0         |                               | TF65-67             | 15A2511201R1007 |              |
| 40.0...51.0         | AF80, AF90                    | TF90-51             | 15A2511201R1001 |              |
| 45.0...60.0         |                               | TF90-60             | 15A2511201R1002 |              |
| 57.0...68.0         |                               | TF90-68             | 15A2511201R1003 |              |
| 65.0...78.0         |                               | TF90-78             | 15A2511201R1004 |              |
| 75.0...87.0         |                               | TF90-87             | 15A2511201R1005 |              |
| 84.0...96.0         | AF110, AF140                  | TF90-96             | 15A2511201R1006 |              |
| 85...90             |                               | TF140DU-90          | 15A2431201R1001 |              |
| 80...110            |                               | TF140DU-110         | 15A2431201R1002 |              |
| 100...135           |                               | TF140DU-135         | 15A2431201R1003 |              |
| 110...142           |                               | TF140DU-142         | 15A2431201R1004 |              |

For AF150 and AF200 use TA200DU-OLR

| Description                    | Type  | Order Code      | LR(5)        |
|--------------------------------|-------|-----------------|--------------|
| Separate mounting kit          | DB10E | 15A201110R0001  | Upon Request |
| Separate mounting kit          | DB42  | 15A2701903R0001 |              |
| Separate mounting kit for TF65 | DB65  | 15A2501201R1001 |              |
| Separate mounting kit for TF90 | DB90  | 15A2501201R1001 |              |

### Electronic overload relays and suitable contactors

|                        |               |               |                  |             |                     |                 |                     |               |                      |
|------------------------|---------------|---------------|------------------|-------------|---------------------|-----------------|---------------------|---------------|----------------------|
| Suitable for Contactor | A9 ... A40    | A30 ... A40   | A50 ... A75      | A85, A110   | A145, A185          | A210 ... A300   |                     |               |                      |
|                        | AL9 ... AL40  | AL30 ... AL40 | AE50 ... AE75    | AE85, AE110 | AF145, AF185        | AF210 ... AF300 |                     |               |                      |
|                        |               |               | AF50 ... AF75    | AF85, AF110 |                     |                 |                     |               |                      |
| EDLR                   | E16DU         | E48DU         | E50DU            | E140DU      | EP305               | EP370           |                     |               |                      |
| Suitable for Contactor | AF400,        | AF580,        | AF1350,          |             | DS/BC6              |                 |                     |               |                      |
|                        | AF400         | AF750         | AF1650           |             | BT/BC7              |                 |                     |               |                      |
| EDLR                   | EP480         | EP750         | E1250DU          |             | E16DU, T16          |                 |                     |               |                      |
| Suitable for Contactor | AF09 ... AF16 | AF25, AF35    | AF40, AF52, AF65 | AF80, AF96  | AF110, AF140, AF145 | AF180, AF205    | AF265, AF305, AF370 | AF400, AF460, | AF580, AF750, AF1250 |
| EDLR                   | EP19          | EP45          | EP65             | EP96        | EP145               | EP205           | EP370               | EP460         | EP750                |