



## TECHNICAL DATA SHEET

| CAPACITOR DUTY CONTACTOR Cat No:   |                 | CA3-5K | CA3-10K       | CA3-15K       | CA3-20K       | CA3-25K       | CA3-35K       | CA3-50K    |            |
|--|-----------------|--------|---------------|---------------|---------------|---------------|---------------|------------|------------|
| Rated voltage  | VOLTS           | 690    |               |               |               |               |               |            |            |
| <b>CURRENT RATINGS AT OPERATIONAL VOLTAGE 415V 50/60 Hz</b>                    |                 |        |               |               |               |               |               |            |            |
| 40°C Ith   | AC-1            | Amps.  | 25            | 25            | 45            | 45            | 45            | 63         | 63         |
| 60°C Ith   | AC-1            | Amps.  | 16            | 16            | 30            | 30            | 30            | 45         | 70         |
| <b>CAPACITOR SWITCHING</b>   |                 |        |               |               |               |               |               |            |            |
| RATING OF 3-PHASE CAPACITOR @  | 230V            | KVAR   | 2.8           | 5.5           | 8.3           | 11            | 13.8          | 19         | 27         |
|  | 240V            | KVAR   | 2.9           | 5.8           | 8.7           | 11.6          | 14.5          | 20         | 30         |
|  | 400V            | KVAR   | 4.8           | 9.6           | 14.5          | 19.2          | 24            | 33         | 48         |
|  | 415V            | KVAR   | 5             | 10            | 15            | 20            | 25            | 35         | 50         |
|  | 500V            | KVAR   | 6             | 12            | 18            | 24            | 30            | 42         | 60         |
|  | 690V            | KVAR   | 8.3           | 16.6          | 25            | 33.2          | 41            | 58         | 83         |
| <b>MECHANICAL, ELECTRICAL AND COIL DATA</b>                                    |                 |        |               |               |               |               |               |            |            |
| MECHANICAL LIFE  |                 | Ops.   | 10 mill       | 10 mill       | 10 mill       | 10 mill       | 10 mill       | 10 mill    | 10 mill    |
| ELECTRICAL LIFE @ AC-6b duty   | AC3,415V        | Ops.   | 3.0 mill      | 3.0 mill      | 1.5 mill      | 1.5 mill      | 1.5 mill      | 1.25 mill  | 1.25 mill  |
| CONTACTOR OPERATIONS (Max no load )  |                 | Ops/hr | 6000          | 6000          | 5000          | 5000          | 5000          | 4000       | 4000       |
| CONTACTOR OPERATIONS (Max with load )  |                 | Ops/hr | 100           | 100           | 100           | 100           | 100           | 100        | 100        |
| SWITCHING DELAY  | MAKE            | msec   | 10-20         | 10-20         | 10-20         | 10-20         | 10-20         | 10-26      | 10-26      |
|  | BREAK           | msec   | 08-18         | 08-18         | 08-18         | 08-18         | 08-18         | 6-14       | 6-14       |
| COIL DATA  | PICK-UP         | VA     | 62            | 62            | 95            | 95            | 95            | 190        | 190        |
|  | HOLD            | VA     | 7.2           | 7.2           | 10.2          | 10.2          | 10.2          | 21         | 21         |
| COIL VOLTAGE RANGE   |                 | VOLTS  | 12.....500    | 12.....500    | 12.....500    | 12.....500    | 12.....500    | 12.....500 | 12.....500 |
| AUXILIARY CONTACTS   | AVAILABLE       | Std    | (1NO+1NC)/2NC | (1NO+1NC)/2NC | (1NO+1NC)/2NC | (1NO+1NC)/2NC | (1NO+1NC)/2NC | 1NO+2NC    | 1NO+2NC    |
| INTEGRAL AUXILIARY CONTACT   | AC1,40°C        | Amps   | 16            | 16            | 16            | 16            | 16            | 16         | 16         |
|  | AC15,415 V      | Amps   | 4             | 4             | 4             | 4             | 4             | 4          | 4          |
| ADD-ON AUXILIARY BLOCK   | AC1,40°C        | Amps   | 12            | 12            | 12            | 12            | 12            | 12         | 12         |
|  | AC15,415 V      | Amps   | 2.5           | 2.5           | 2.5           | 2.5           | 2.5           | 2.5        | 2.5        |
| <b>TERMINAL WIRE SIZES AND TIGHTENING TORQUE</b>                               |                 |        |               |               |               |               |               |            |            |
| POWER CONTACTS   | mm <sup>2</sup> |        | 2.5 - 4       | 2.5 - 4       | 4 - 10        | 4 - 10        | 4 - 35        | 6 - 50     | 6 - 50     |
|  | AWG             |        | 14 - 10       | 14 - 10       | 12 - 8        | 12 - 8        | 10 - 3        | 10 - 1/0   | 10 - 1/0   |
|  | Nm              |        | 1.3 - 2.3     | 1.3 - 2.3     | 2.5 - 3.4     | 2.5 - 3.4     | 1 - 3         | 5 - 6      | 5 - 6      |
| AUXILIARY CONTACTS / COIL TERMINALS  | mm <sup>2</sup> |        | 2.5 - 4       |               |               |               |               |            |            |
|  | AWG             |        | 14 - 10       |               |               |               |               |            |            |
|  | Nm              |        | 1.3 - 2.3     |               |               |               |               |            |            |
| SHORT TIME WITHSTAND   | 1Sec. at 60°C   | Amps   | 190           | 190           | 400           | 400           | 400           | 800        | 1050       |
| <b>BACKUP PROTECTION RECOMMENDED AS PER IEC - 947- 4.1 TYPE 2 COORDINATION</b> |                 |        |               |               |               |               |               |            |            |
| Max.   |                 | Amps   | 25            | 35            | 50            | 50            | 50            | 50         | 125        |

Where Capacitor Duty Contactors are used in APFC(Automatic power factor Correction) Panel, suitable CRC3 link should be used across the coil to suppress the voltage that occurs due to self inductance during interruptions. By providing CRC3 link the malfunction of APFC controller is totally eliminated, resulting in a better life of the Contactor and Capacitor.