

TC exceed Contactor is the derivative of understanding customer's varied applications & requirements over the period. exceed Contactor are built for exceeding customer expectations & provide cost effective solutions assuring design flexibility and safety. exceedD Contactor are manufactured in our State-of-the-Art fully integrated ISO 90001 Certified manufacturing facility possessing comprehensive infrastructure inclusive of design, tooling, component manufacturing, assembling and testing.

exceedD Contactors are reliable, user friendly & its flexible design allows product selection with cost effective solutions.

exceedD Contactor conforms to IEC60947-4-1 standards.

**exceedD Contactor solutions & advantages**

- Complete competitive 3 Pole new Contactor range
  - Control Relay 45mm frame size having 3 contact configuration options
  - 3P Contactor AC3 rating 6-95A, 4 frame sizes, AC
- Safety through finger touch proof shield
- Efficient magnet with energy saving coils
- Design flexibility
- Common Add-On Accessories - Saves costs
- High Mechanical & Electrical life
- Short Circuit Protection, Type-1 & 2 Co-ordination



**Industrial Applications**

- Machine Tools
- Power Supply Solutions
- Motor Controls
- Printing & Packaging Machines
- Elevator & Escalators
- Hoist & Cranes
- Compressors
- HVAC
- Pumps
- Solar

**Overload Relays**

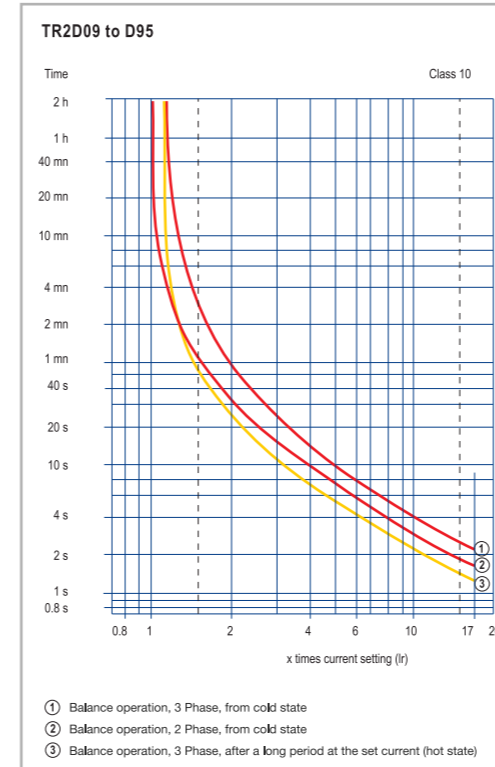
Thermal Overload Relay provides protection against operational overload & single phasing having prior of site selectable auto or manual facility.



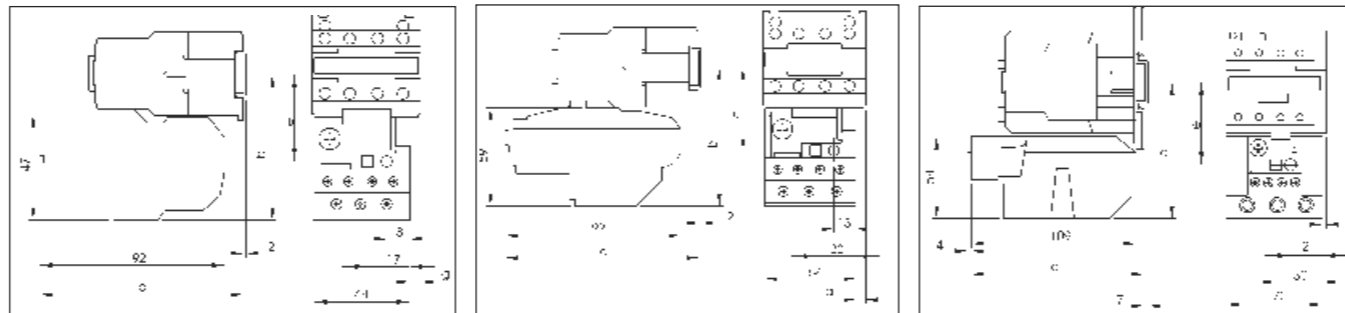
**Silent Features**

- Built-in single phase protection.
- Potential free 1NO and 1NC contacts.
- Yellow flag indicator for indication of relay tripping.
- Manual reset facility.
- IP 20 finger touch proof

**Overload Relay Tripping Curves**



**Overload Relay Dimensions**



TR2D09301-D25322				
Mounting With	b	c	e	g
TC1D09, D12, D18	81	98	50	0
TC1D25 / TP1DC25	86	108	55	10.7
TC1D32	86	109	55	8.1

TR2D32353-32355				
Mounting With	b	c	e	g
TC1D25/TP1DC25	97.5	98	60	1.5
TC1D32	97.5	98	60	0.5

TR2D09301-D25322				
Mounting With	b	c	e	g
TC1D40	111	119	72.4	4.5
TC1D50	111	119	72.4	4.5
TC1D65	111	119	72.4	4.5
TC1D80	115.5	123.4	76.9	9.5
TC1D95	115.5	123.4	76.9	9.5

We touch your electricity everyday!

*Exceeding expectations !!*



RoHS Compliant

**Common Add - On Accessories**

**Common Add - On Accessories**

<p>Auxiliary Contact Block (Side mounted) <b>TA8-DN</b></p> <table border="1"> <tr><td>NO</td><td>NC</td></tr> <tr><td>2</td><td>0</td></tr> <tr><td>1</td><td>1</td></tr> </table> <p>TA8-DN20 TA8-DN11</p>	NO	NC	2	0	1	1	<p>Auxiliary Contact Block (Front mounted) <b>TA1-DN</b></p> <table border="1"> <tr><td>NO</td><td>NC</td></tr> <tr><td>0</td><td>1</td></tr> <tr><td>1</td><td>0</td></tr> </table> <p>TA1-DN01 TA1-DN10</p>	NO	NC	0	1	1	0	<p>Auxiliary Contact Block (Front mounted) <b>TA1-DN</b></p> <table border="1"> <tr><td>NO</td><td>NC</td></tr> <tr><td>1</td><td>1</td></tr> <tr><td>0</td><td>2</td></tr> <tr><td>2</td><td>0</td></tr> </table> <p>TA1-DN11 TA1-DN02 TA1-DN20</p>	NO	NC	1	1	0	2	2	0	<p>Latch Add-on Block (Front mounted) <b>LA6-DK01</b></p> <p>LA6-DK01</p>
NO	NC																						
2	0																						
1	1																						
NO	NC																						
0	1																						
1	0																						
NO	NC																						
1	1																						
0	2																						
2	0																						



**C&S Electric Limited**

Head Office & Central Marketing Office:  
222, Okhla Industrial Estate, Phase - III, New Delhi - 110020  
Tel.: +91-11-3088 7520-29 Fax: +91-11-2684 8241, 2684 7342  
E-mail: cmo@cselectric.co.in  
International Business Division: Tel. : +91-11-4161 3503, 3088 7520-29, Fax: +91-11-2683 8291, 2684 7342  
email : exports@cselectric.co.in



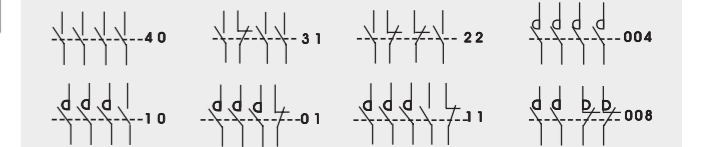
Contactors

Conforming: IS 13947-4-1 / IEC 60947-4-1



AC Coil Voltage for 3 Pole Contactors 9A-95A & Control Relays

Contactor	Voltage					
TCA2-DN/TC1-D	24	48	110*	220*	240*	415
50Hz	B5	E5	F5	M5	U5	N5
50/60Hz	B7	E7	F7	M7	U7	N7



Product data sheet - exceed Contactor	Control Relay	TC1D0610E/TC1D0601E	TC1D0910E/TC1D0901E	TC1D1210E/TC1D1201E	TC1D1810E/TC1D1801E	TC1D2510E/TC1D2501E	TC1D3210E/TC1D3201E	TC1D4011E	TC1D5011E	TC1D6511E	TC1D8011E	TC1D9511E
	3P CONTACTOR	3P CONTACTOR	3P CONTACTOR	3P CONTACTOR	3P CONTACTOR	3P CONTACTOR	3P CONTACTOR	3P CONTACTOR	3P CONTACTOR	3P CONTACTOR	3P CONTACTOR	3P CONTACTOR
	2NO+2NC,3NO+1NC, 4NO, 500V AC11	1NO/1NC 4kW 440V AC3	1NO/1NC 4kW 440V AC3	1NO/1NC 5.5kW 440V AC3	1NO/1NC 7.5kW 440V AC3	1NO/1NC 11kW 440V AC3	1NO/1NC 15kW 440V AC3	1NO+1NC 18.5kW 440V AC3	1NO+1NC 22kW 440V AC3	1NO+1NC 30kW 440V AC3	1NO+1NC 37kW 440V AC3	1NO+1NC 45kW 440V AC3
Utilisation category		AC-3	AC-3	AC-3	AC-3	AC-3	AC-3	AC-3	AC-3	AC-3	AC-3	AC-3
Control circuit type	AC	AC	AC	AC	AC	AC	AC	AC	AC	AC	AC	AC
Poles description	4P	3P	3P	3P	3P	3P	3P	3P	3P	3P	3P	3P
Motor power kW	.... .... ....	1.1 kW at 220V AC 50 Hz 2.2 kW at 380...440V AC 50 Hz 4 kW at 500...690V AC 50 Hz	2.2 kW at 220V AC 50 Hz 4 kW at 380...440V AC 50 Hz 5.5 kW at 500...690V AC 50 Hz	3 kW at 220V AC 50 Hz 5.5kW at 380...440V AC 50 Hz 7.5 kW at 500...690V AC 50 Hz	4 kW at 220V AC 50 Hz 7.5kW at 380V AC 50 Hz 9 kW at 415...440V AC 50 Hz 10kW at 500...690V AC 50 Hz	5.5 kW at 220V AC 50 Hz 11kW at 380...440V AC 50 Hz 15 kW at 500...690V AC 50 Hz	7.5 kW at 220V AC 50 Hz 15kW at 380...440V AC 50 Hz 18.5 kW at 500...690V AC 50 Hz	11 kW at 220V AC 50 Hz 18.5kW at 400V AC 50 Hz 22 kW at 415...500V AC 50 Hz 30kW at 660...690V AC 50 Hz	15kW at 220V AC 50 Hz 22kW at 400V AC 50 Hz 25 kW at 415V AC 50 Hz 30 kW at 440V AC 50 Hz 33kW at 660...690V AC 50 Hz	18.5 kW at 220V AC 50 Hz 30kW at 380...440V AC 50 Hz 37 kW at 415...690V AC 50 Hz	22 kW at 220V AC 50 Hz 37kW at 400V AC 50 Hz 45 kW at 415...440V AC 50 Hz 45kW at 660...690V AC 50 Hz	25 kW at 220V AC 50 Hz 45kW at 380-440V AC 50 Hz 55 kW at 500V AC 50 Hz 45kW at 660...690V AC 50 Hz
Rated operational current (Ie) (<= 55°C)AC AC-3 for power circuit <= 440V	AC 15 Duty (IEC 947-5-1) AC 11 Duty (IEC 851) 6A at 500V	6 A	9 A	12 A	18 A	25 A	32 A	40 A	50 A	65 A	80 A	95 A
Auxiliary contact composition	1 NO/1NC	2NO+2NC,3NO+1NC,4NO	1 NO/1NC	1 NO/1NC	1 NO/1NC	1 NO/1NC	1NO+1NC	1NO+1NC	1NO+1NC	1NO+1NC	1NO+1NC	1NO+1NC
Rated operational voltage (Ue) for power circuit	690 V AC	690 V AC	690 V AC	690 V AC	690 V AC	690 V AC	690 V AC	690 V AC	690 V AC	690 V AC	690 V AC	690 V AC
Rated insulation voltage (Ui) for control circuit conforming to IEC 60947-4-1	1000 V	1000 V	1000 V	1000 V	1000 V	1000 V	1000 V	1000 V	1000 V	1000 V	1000 V	1000 V
Rated impulse withstand voltage (Uimp)	6 kV	6 kV	6 kV	6 kV	6 kV	6 kV	6 kV	6 kV	6 kV	6 kV	6 kV	6 kV
Mounting position (w.r.t. normal vertical mounting plane)	± 30°	± 30°	± 30°	± 30°	± 30°	± 30°	± 30°	± 30°	± 30°	± 30°	± 30°	± 30°
Conventional free air thermal current (Ith) (r<=40°C)	10 A	10 A	25 A	25 A	32 A	40 A	50 A	60 A	80 A	80 A	125 A	125 A
Rated making capacity (conforming to IEC 60947-4)	250 A	250 A	250 A	250 A	300 A	450 A	550 A	800 A	900 A	1000 A	1100 A	1200 A
Rated breaking capacity (220-440V)conforming to IEC 60947-4	250 A	250 A	250 A	250 A	300 A	450 A	550 A	800 A	900 A	1000 A	1100 A	1100 A
Average impedance (at Ith and 50 Hz)	2.5 Ω	2.5 Ω	2.5 Ω	2.5 Ω	2.5 Ω	2 Ω	2 Ω	1.5 Ω	1 Ω	0.8 Ω	0.8 Ω	0.8 Ω
Power dissipation per pole W AC-3	0.2	0.09	0.36	0.8	1.25	2.0	2.4	3.7	4.2	5.1	7.2	7.2
Inrush power in VA (at 20°C, 50 Hz)	60	60	60	60	60	90	90	200	200	200	200	200
(at 20°C, 60 Hz)	70	70	70	70	70	100	100	220	220	220	220	220
Hold-in power consumption in VA (at 20°C, 50 Hz)	7	7	7	7	7	7.5	7.5	20	20	20	20	20
(at 20°C, 60 Hz)	7.5	7.5	7.5	7.5	7.5	8.5	8.5	22	22	22	22	22
Operating time (Opening)	4...12 ms	4...12 ms	4...12 ms	4...12 ms	4...12 ms	5...19 ms	5...19 ms	8...12 ms	8...12 ms	8...12 ms	6...20 ms	6...20 ms
(Closing)	12...22 ms	12...22 ms	12...22 ms	12...22 ms	12...22 ms	15...24 ms	15...24 ms	20...26 ms	20...26 ms	20...26 ms	20...35 ms	20...35 ms
Mechanical durability (in million cycles)	20	20	20	20	16	16	16	16	16	16	10	10
Electrical durability (in million cycles) AC3	1	1	1	1	1	1	1	1	1	0.9	0.9	0.7
Height	74 mm	74 mm	74 mm	74 mm	74 mm	84 mm	84 mm	127 mm	127 mm	127 mm	127 mm	127 mm
Width	45 mm	45 mm	45 mm	45 mm	45 mm	56 mm	56 mm	75 mm	75 mm	75 mm	85 mm	85 mm
Depth	80 mm	80 mm	80 mm	80 mm	85 mm	94 mm	99 mm	114 mm	114 mm	114 mm	120 mm	120 mm
Product weight	0.32 Kg	0.32 Kg	0.32 Kg	0.32 Kg	0.32 Kg	0.32 Kg	0.32 Kg	1.15 Kg	1.15 Kg	1.15 Kg	1.5 Kg	1.5 Kg

