

T&F-Line Contactors

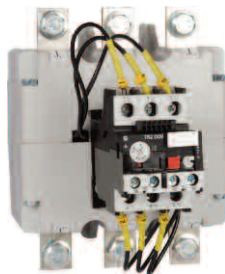
Specifications



TR2D25322

Standard Fault Ratings

High Fault Ratings



LR1F105



Standard Fault Ratings
with T-Range Relay

Bimetallic Overload Relay (Class 10), Base Plate for Independent Mounting

RELAY REFERENCE	RELAY SETTING RANGE (A)	STANDARD POWER RATINGS OF 3-PHASE MOTORS 50/60Hz, AC3 CATEGORY					BACK UP		BASE PLATE* REFERENCE
		220V KW	380V KW	415V KW	440V KW	660V KW	FUSE RATING aM(A)	g1 (A)	
TR2D09301	0.1 to 0.16	—	—	—	—	—	0.25	2	TA7D0964
TR2D09302	0.16 to 0.25	—	—	—	—	—	0.5	2	
TR2D09303	0.25 to 0.4	—	—	—	—	—	1	2	
TR2D09304	0.4 to 0.63	—	—	—	—	0.37	1	2	
TR2D09305	0.63 to 1	—	—	—	—	0.55	2	4	
TR2D09306	1 to 1.6	—	0.37	—	0.55	1.1	2	4	
TR2D093X6	1.25 to 2	—	0.55	0.75	0.75	1.3	4	6	
TR2D09307	1.6 to 2.5	0.37	0.75	1.1	1.1	1.5	4	6	
TR2D09308	2.5 to 4	0.75	1.5	1.5	1.5	3	6	10	
TR2D09310	4 to 6	1.1	2.2	2.2	2.2	4	8	16	
TR2D09312	5.5 to 8	1.5	3	3.7	3.7	5.5	12	20	TA7D3264
TR2D09314	7 to 10	2.2	4	4	4	7.5	12	20	
TR2D12316	9 to 13	3	5.5	5.5	5.5	10	16	25	
TR2D18321	12 to 18	4	7.5	9	9	15	20	35	
TR2D25322	17 to 25	5.5	11	11	11	18.5	25	50	
TR2D32353	23 to 32	7.5	15	15	15	—	40	63	
TR2D32355	28 to 36	9	15	18.5	18.5	—	40	80	
TR2D40355	30 to 40	10	18.5	22	22	30	40	100	
TR2D65357	37 to 50	11	22	25	25	37	63	100	
TR2D65359	48 to 65	18.5	25	30	30	50	63	100	TA7D4064
TR2D65361	55 to 70	20	30	37	37	55	80	125	
TR2D80363	63 to 80	22	33	40	40	59	80	125	
TR2D95365	80 to 93	25	45	49	50	80	100	160	

Overload Relays F – Range, (Independent Mounting)

RELAY REFERENCE	RELAY SETTING RANGE (A)	STANDARD POWER RATINGS OF 3-PHASE MOTORS 50/60Hz, AC3 CATEGORY					BACK UP		BASE PLATE* REFERENCE
		220V KW	380V KW	415V KW	440V KW	660V KW	FUSE RATING aM(A)	g1 (A)	
LR1F105	65 to 105	25	51	55	59	90	0.25	160	
LR1F125	80 to 125	30	59	59	63	110	125	200	
LR1F160	100 to 160	45	80	80	90	140	160	250	
LR1F200	125 to 200	55	90	100	110	160	200	315	
LR1F250	160 to 250	63	110	129	140	200	250	400	
LR1F315	200 to 315	80	150	160	160	257	315	500	
LR1F400	250 to 400	110	185	200	220	335	400	630	
LR1F500	315 to 500	140	250	257	280	445	500	800	
LR1F630	400 to 630	180	315	355	375	500	630	800	
*LR1F800	500 to 800	220	400	425	450	—	—	1000	
*LR1F1000	630 to 1000	295	500	500	500	—	—	1250	

Notes : 1. Protected shrouds for main poles or power poles to be ordered separately for LR1 Relays

2. Standard Fault Ratings  with TR2 Relay.

*UL/CSA not available

T&F-Line Contactors

Characteristics

Environment			
Conforming to standards			IEC 60947-1, IEC 60947-4-1, NFCEN 60947-4-1, VDE 0660, BSEN 60947
Approvals			UL, CSA, IEC
Degree of protection	Conforming to VDE 0106		Protection against direct finger contact IP 2X
Protective treatment	Conforming to IEC 68		"TH"
Ambient air temperature (around the device)	Storage	°C	-60 to +70
	Operation, without derating	°C	-25 to +60
	Max. & Min. operating temp.	°C	-40 to +70
Operating position	Without derating		Any Position, in relation to normal vertical mounting plane
Shock resistance	Permissible acceleration		15gn - 11ms, conforming to IEC 68-2-7
Vibration resistance	Permissible acceleration		6gn, conforming to IEC 68-2-6
Dielectric strength at 50 Hz	Conforming to IEC 255-5	kV	6
Impulse withstand voltage	Conforming to IEC 801-5	kV	6

Electrical Characteristics of Power Circuit

TYPE	TR2D	UNIT	09301-12316	18321	25322-65361	80363-95365
Tripping class			10	10	10	10
Rated insulation Voltage (Ui)	Conforming to IEC 60947-4-1	V	TR2D09301~D32355:690V		TR2D40355~D95365:1000V	
Rated operating voltage upto	Conforming to UL, CSA	V	600	600	600	600
Rated impulse withstand voltage (Uimp)		kV	6	6	6	6
Frequency limits	Of the operational current	Hz	0... 400	0...400	0...400	0...400
Setting range	Depending on model	A	0.1...13	16...18	17...70	63...193
Connecting to screw clamp terminal			Minimum / Maximum CSA			
Flexible cable without cable end	1 conductor	mm ²	1.5 / 10	1.5 / 10	4 / 35	4 / 50
Flexible cable with cable end	1 conductor	mm ²	1 / 4	1 / 6	4 / 35	4 / 50
Solid cable without cable end	1 conductor	mm ²	1 / 6	1.5 / 4	4 / 35	4 / 50
Tightening torque		Nm	1.7	2.5	9	9
Connection to spring terminals			Minimum / Maximum CSA			
Flexible cable without cable end	1 conductor	mm ²	1.5 / 4	1.5 / 4	–	–
Solid Cable without cable end	1 conductor	mm ²	1.5 / 4	1.5 / 4	–	–

Operating Characteristics

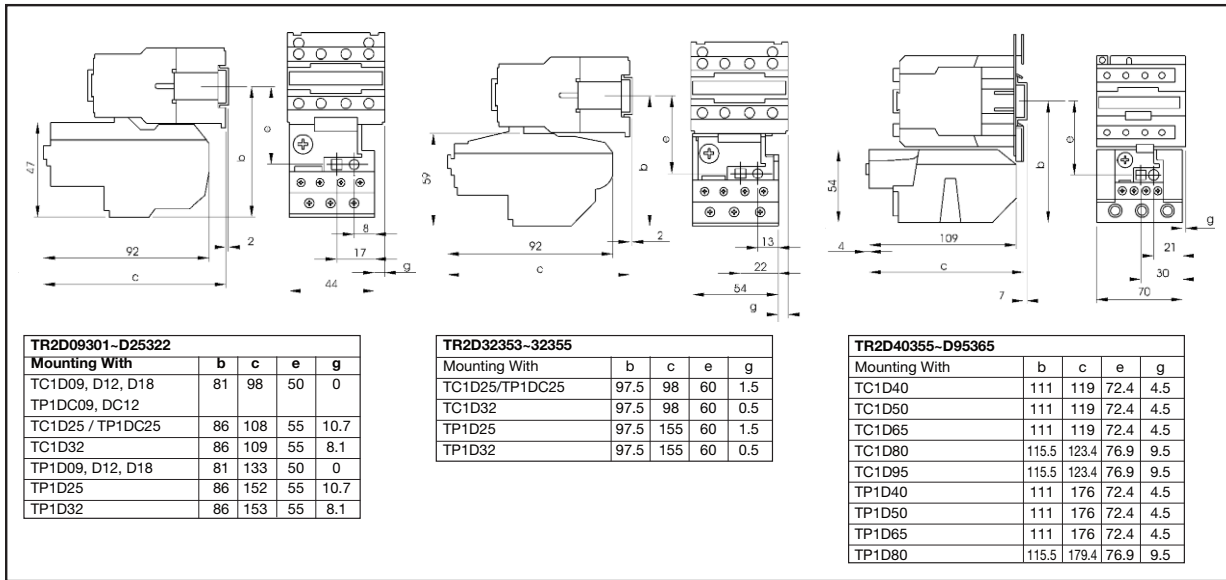
TYPE	TR2D	UNIT	09301-12316	18321	25322-65361	80363-95365
Temperature Compensation		°C	-20...+60	-30...+60	-30...+60	-20...+60
Tripping Threshold	Conforming to IEC 6047-4-1	A		1.14 ± 0.06In		
Sensitivity to phase failure	Conforming to IEC 60947-4-1		Tripping current 25% above In			

Auxiliary Contact Characteristics

Conventional thermal Curent		A			5			
Maximum consumption of operating coil of controlled contactors (Occasional operating cycles of contact 95 - 96)	AC Supply	V	24	48	110	220	380	600
		VA	100	200	400	600	600	600
		V	24	48	110	220	440	–
Short circuit protection	By gG or BS fuse Max. rating or by GB2 circuit-breaker	W	100	100	50	45	25	–
		A	5					
Connection to screw clamp terminal	Minimum / Maximum CSA							
Flexible cable without cable end	1 or 2 conductors	mm²	1 / 2.5					
Flexible cable withcable end	1 or 2 conductors	mm²	1 / 2.5					
Solid cable without cable end	1 or 2 conductors	mm²	1 / 2.5					
Tightening torque	1 or 2 conductors	Nm	1.85					
Connecting to spring terminal	Minimum / Maximum CSA							
Flexible cable without cable end	1 or 2 conductors	mm²	1 / 2.5					
Solid cable without cable end	1 or 2 conductors	mm²	1 / 2.5					

T&F-Line Contactors

Dimensions, Tripping Curves



D

