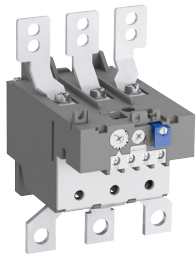


TA200DU thermal overload relays – 66 to 200 A

Ordering details



TA200DU

2CDC23016F0013



KPR-101L

1SFC151224F0002

The TA200DU thermal overload relays are economic electromechanical protection devices for the main circuit. They offer reliable protection for motors in the event of overload or phase failure. The devices have trip class 10A.

The thermal overload relays are three pole relays with bimetal tripping elements. The motor current flows through the bimetal tripping elements and heats them directly and indirectly. In case of an overload (over current), the bimetal elements bent as a result of the heating. This leads to a release of the relay and a change of the contacts switching position (95-96 / 97-98).

- Manual or automatic reset selectable
- Phase loss sensitive acc. to IEC/EN 60947-4-1
- TEST and STOP function – Trip indication on the front
- Temperature compensation
- Suitable for three- and single-phase applications
- ATEX variants available

Setting range	Short-circuit protective device	Trip class	Type	Order code	Weight (1 pce) kg
A					

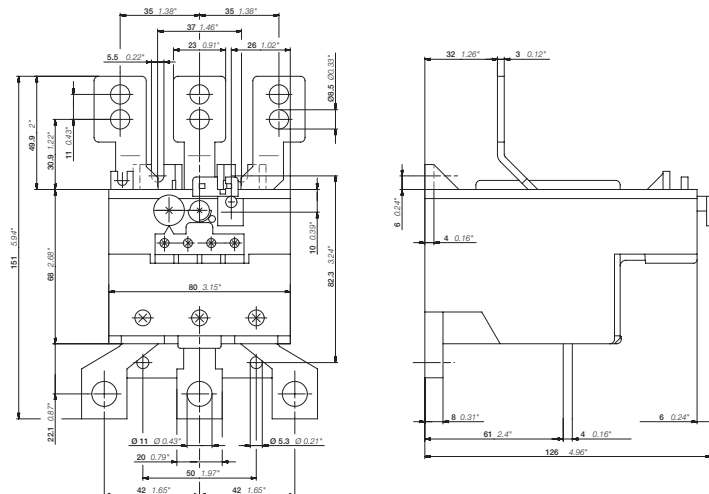
Suitable for AF190...AF205 contactors

66 ... 90	200 A, fuse type gG / 125 A aM	10A	TA200DU-90	1SAZ421201R1001	0.755
80 ... 110	224 A, fuse type gG / 160 A aM	10A	TA200DU-110	1SAZ421201R1002	0.760
100 ... 135	224 A, fuse type gG / 200 A aM	10A	TA200DU-135	1SAZ421201R1003	0.760
110 ... 150	250 A, fuse type gG / 200 A aM	10A	TA200DU-150	1SAZ421201R1004	0.760
130 ... 175	315 A, fuse type gG / 250 A aM	10A	TA200DU-175	1SAZ421201R1005	0.770
150 ... 200	315 A, fuse type gG / 250 A aM	10A	TA200DU-200	1SAZ421201R1006	0.785
66 ... 90	200 A, fuse type gG / 125 A aM	10A	TA200DU-90-V1000 (1)	1SAZ421301R1001	0.755
80 ... 110	224 A, fuse type gG / 160 A aM	10A	TA200DU-110-V1000 (1)	1SAZ421301R1002	0.760
100 ... 135	224 A, fuse type gG / 200 A aM	10A	TA200DU-135-V1000 (1)	1SAZ421301R1003	0.760
110 ... 150	250 A, fuse type gG / 200 A aM	10A	TA200DU-150-V1000 (1)	1SAZ421301R1004	0.760
130 ... 175	315 A, fuse type gG / 250 A aM	10A	TA200DU-175-V1000 (1)	1SAZ421301R1005	0.770
150 ... 200	315 A, fuse type gG / 250 A aM	10A	TA200DU-200-V1000 (1)	1SAZ421301R1006	0.785

(1) ATEX variant

Ordering details accessories

Description	Suitable for	Type	Order code	Weight (1 pce) kg
Terminal shroud	TA200DU	LT200/A	1SAZ401901R1001	0.090
Single mounting kit	TA200DU	DB200	1SAZ401110R0001	0.225
Reset push button	E16, EF, TF, T16, TA200	KPR-101L	1SFA616162R1014	0.027



TA200DU

Main dimensions mm, inches

2CDC23022F0011

TA200DU thermal overload relays – 66 to 200 A

Technical data

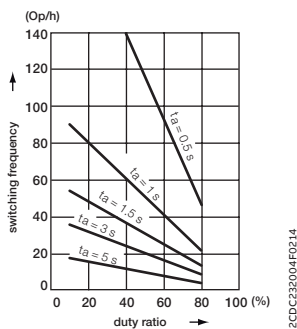
Main circuit – Utilization characteristics according to IEC/EN

Type	TA200DU / TA200DU-V1000
Standards	IEC/EN 60947-1, IEC/EN 60947-4-1
Rated operational voltage Ue	690 V AC / 440 V DC
Rated frequency	DC, 50/60 Hz
Frequency range	0 ... 400 Hz
Trip class	10A
Number of poles	3
Duty time	100%
Operating frequency without early tripping	Up to 15 operations/h, see "Technical diagram – Intermittent periodic duty"
Rated impulse withstand voltage Uimp	6 kV
Rated insulation voltage Ui	690 V AC

Auxiliary circuit according to IEC/EN

Type	TA200DU / TA200DU-V1000
Rated operational voltage Ue	500 V AC, 440 V DC
Conventional free air thermal current Ith	N.C., 95-96 10 A N.O., 97-98 6 A
Rated frequency	DC, 50/60 Hz
Number of poles	1 N.O. + 1 N.C.
Ie / Rated operational current AC-15 acc. to IEC/EN 60947-5-1 for utilization category	
110-120 V	N.C., 95-96 3.00 A N.O., 97-98 1.50 A
220-230-240 V	N.C., 95-96 3.00 A N.O., 97-98 1.20 A
440 V	N.C., 95-96 0.75 A N.O., 97-98 0.37 A
480-500 V	N.C., 95-96 0.30 A N.O., 97-98 0.25 A
Ie / Rated operational current DC-13 acc. to IEC/EN 60947-5-1 for utilization category	
24 V	N.C., 95-96 1.25 A N.O., 97-98 1.25 A
60 V	N.C., 95-96 0.25 A N.O., 97-98 0.25 A
110-120-125 V	N.C., 95-96 0.25 A N.O., 97-98 0.25 A
250 V	N.C., 95-96 0.12 A N.O., 97-98 0.04 A
Minimum switching capacity	17 V / 3 mA
Short-circuit protective device	N.C., 95-96 10 A, fuse type gG N.O., 97-98 6 A, fuse type gG
Rated impulse withstand voltage Uimp	6 kV
Rated insulation voltage Ui	690 V

Technical diagram – Intermittent periodic duty



ta: Motor starting time

TA200DU thermal overload relays – 66 to 200 A

Technical data

Main circuit – Utilization characteristics according to UL/CSA

Type	TA200DU / TA200DU-V1000
Standards	UL 508, CSA 22.2 No. 14
Maximum operational voltage	600 V AC/DC
Trip rating	125% of FLA
Full load amps (FLA)	See table "Full load amps and short-circuit protective device"
Short-circuit rating RMS symmetrical	See table "Full load amps and short-circuit protective device"
Short-circuit protective device	See table "Full load amps and short-circuit protective device"

Auxiliary circuit according to UL/CSA

Type	TA200DU / TA200DU-V1000	
Contact rating	N.C., 95-96	C600
	N.O., 97-98	B600
Conventional thermal current	5 A	

Full load amps and short-circuit protective device

Type	Full load amps (FLA)	Short-circuit protective device 480 / 600 V AC						
		Short circuit rating RMS symmetrical	Fuse type	Listed circuit breaker	Short circuit rating RMS symmetrical	Fuse type	Short circuit rating RMS symmetrical	Listed circuit breaker
TA200DU-90 / TA200DU-90-V1000	90 A	10 kA	250 A, K5 / RK5	225 A	100 kA	250 A, Class J	100 kA	250 A
TA200DU-110 / TA200DU-110-V1000	110 A	10 kA	250 A, K5 / RK5	225 A	100 kA	250 A, Class J	100 kA	250 A
TA200DU-135 / TA200DU-135-V1000	135 A	10 kA	300 A, K5 / RK5	225 A	100 kA	250 A, Class J	100 kA	250 A
TA200DU-150 / TA200DU-150-V1000	150 A	10 kA	300 A, K5 / RK5	225 A	100 kA	250 A, Class J	100 kA	250 A
TA200DU-175 / TA200DU-175-V1000	175 A	10 kA	300 A, K5 / RK5	225 A	100 kA	300 A, Class J	100 kA	300 A
TA200DU-200 / TA200DU-200-V1000	200 A	10 kA	400 A, K5 / RK5	400 A	100 kA	400 A, Class J	100 kA	400 A

TA200DU thermal overload relays – 66 to 200 A



Technical data

General technical data





Type	TA200DU	TA200DU-V1000
Pollution degree	3	
Phase loss sensitive	Yes	
Ambient air temperature		
Operation		
Open - compensated	-25 ... +55 °C	-5 ... +40 °C
Open	-25 ... +55 °C	-5 ... +40 °C
Storage	-40 ... +70 °C	
Ambient air temperature compensation	Acc. to IEC/EN60947-4-1	
Maximum operating altitude permissible	2000 m	
Resistance to shock acc. to IEC 60068-2-27	12g / 15 ms	
Mounting position	Position 1-6	
Mounting	Mount on the contactor and tighten the screws of the main circuit terminals or with single mounting kit	
Degree of protection	Housing	IP20
	Main circuit terminals	IP00

Electrical connection

Main circuit

Type	TA200DU / TA200DU-V1000
Connecting capacity	
 Rigid	1 x 25 ... 120 mm ²
 Flexible	1 x 25 ... 120 mm ²
Stranded acc. to UL/CSA	1 x AWG 4 ... 0000
Flexible acc. to UL/CSA	1 x AWG 4 ... 0000
Lugs	L > 10 mm
Tightening torque	25 Nm / 220 lb.in
Recommended screwdriver	Open bars

Auxiliary circuit

Type	TA200DU / TA200DU-V1000
Connecting capacity	
 Rigid	1 or 2 x 0.75 ... 4 mm ²
 Flexible with ferrule	1 or 2 x 0.75 ... 2.5 mm ²
 Flexible with insulated ferrule	1 x 0.75 ... 2.5 mm ²
	2 x 0.75 ... 1 mm ²
 Flexible	1 or 2 x 0.75 ... 2.5 mm ²
Stranded acc. to UL/CSA	1 or 2 x AWG 18 ... 14
Flexible acc. to UL/CSA	1 or 2 x AWG 18 ... 14
Stripping length	9 mm
Tightening torque	0.8 ... 1.3 Nm / 12 lb.in
Recommended screwdriver	M3.5 (Poizdriv 2)