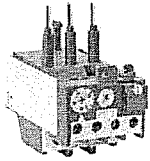
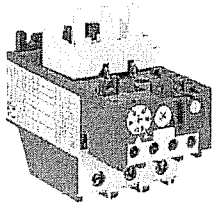


TA25 - TA450
Class 10
for Contactors A9 – A/AF300

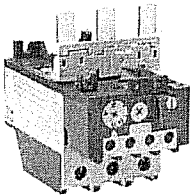
2



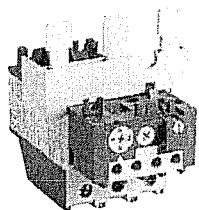
TA25DU



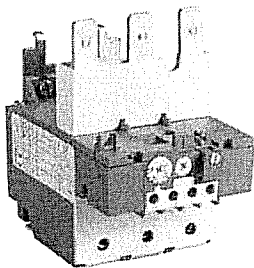
TA42DU



TA75DU



TA80DU



TA110DU

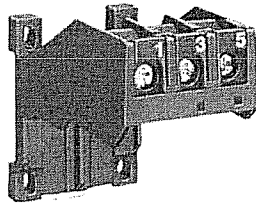
For contactor	Setting range A	Suffix Code	Catalog number	List price
A/AE/AL9 – A/AE/AL40	0.1 – 0.16	A	TA25DU0.16	\$ 63
	0.16 – 0.25	B	TA25DU0.25	
	0.25 – 0.4	C	TA25DU0.4	
	0.4 – 0.63	D	TA25DU0.63	
	0.63 – 1.0	E	TA25DU1.0	
	1.0 – 1.4	F	TA25DU1.4	
	1.3 – 1.8	G	TA25DU1.8	
	1.7 – 2.4	H	TA25DU2.4	
	2.2 – 3.1	J	TA25DU3.1	
	2.8 – 4.0	K	TA25DU4.0	
	3.5 – 5.0	L	TA25DU5.0	
	4.5 – 6.5	M	TA25DU6.5	
	6.0 – 8.5	N	TA25DU8.5	
	7.5 – 11	P	TA25DU11	
10 – 14	Q	TA25DU14		
13 – 19	R	TA25DU19		
18 – 25	S	TA25DU25		
24 – 32	T	TA25DU32		
A/AE30 – A/AE40	18 – 25	A	TA42DU25	78
	22 – 32	B	TA42DU32	
	29 – 42	C	TA42DU42	
A/AE/AF50 – A/AE/AF75	18 – 25	A	TA75DU25	102
	22 – 32	B	TA75DU32	
	29 – 42	C	TA75DU42	
	36 – 52	D	TA75DU52	
	45 – 63	E	TA75DU63	
	60 – 80	F	TA75DU80	
A/AE/AF95 – A/AE/AF110	29 – 42	C	TA80DU42	135
	36 – 52	D	TA80DU52	
	45 – 63	E	TA80DU63	
	60 – 80	F	TA80DU80	
	65 – 90	A	TA110DU90	165
	80 – 110	B	TA110DU110	
A/AF145 – A/AF185	65 – 90	A	TA200DU90	165
	80 – 110	B	TA200DU110	
	100 – 135	C	TA200DU135	
	110 – 150	D	TA200DU150	225
	130 – 175	E	TA200DU175	
	150 – 200	F	TA200DU200	
	130 – 185	A	TA450DU185 ①	
A/AF210 – A/AF300	165 – 235	B	TA450DU235	488
	220 – 310	C	TA450DU310	
AF400 – AF750	See electronic overloads, pages 2.21			

① TA450 overloads require mounting kits for installation.

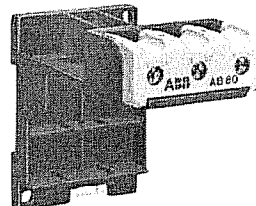
Accessories

Thermal
Overload
relays

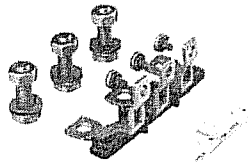
2



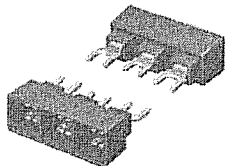
DB25/25A



DB80



DB200



LC26-B1

Separate mounting kits

For O/L relays	Amps	Catalog number	List price
TA25DU	0.1 - 25	DB25/25A	\$ 30
TA25DU	24 - 32	DB25/32A	38
TA42DU, TA75DU, TA80DU	18 - 80	DB80	45
TA110DU, TA200DU	100 - 200	DB200	60

Flat pin terminal blocks

Mounting on:	Catalog number	List price
TA25DU relay DB25/25A or DB25/32A	LC30-T LC26-B1	\$ 6

Terminal block — AWG #8 cable

Mounting on:	Catalog number	List price
TA25DU (25A or less) or DB25/25A	DX25	\$ 15

LC terminal blocks can be used to convert standard connections into Faston connections: 2 x 6.3mm or 4 x 2.8mm per pole. The connections are protected against accidental contact.

The LC30-T has a terminal block for the 3 power terminals and a second for the 4 auxiliary terminals of a TA25DU thermal O/L relay.

The LC26-B1 has two identical terminal blocks each for 3 power terminals. This block allows the power terminals to be mounted with two DB25 kits or a TA25DU thermal O/L relay and DB25 kit assembly.

NOTE: According to DIN 46429 part 1 and NFC 20-120 the max. capacity of a Faston connection is 25 A.

Mounting kit — for TA450 overload relay

For contactor	Catalog number	List price
A145 - A185	DT450/A185	\$ 225
A210 - A300	DT450/A300	

Terminal shrouds — for contactors and overload relays

Contactor	Overload relay	Catalog number	List price
A9 - A16 A26 - A40	TA25DU	Included	—
A30 - A40	TA42DU	Included	—
A50 - A75	TA75DU	Included	—
A95 - A110	TA80DU TA110DU	Included	—
A145 - A185	TA200DU	LT185-AY	\$ 10
A145 - A185	Load side of TA200DU	LT200A185	50

Terminal lug kits

Wire range	For overloads	Catalog number	List price
6 - 250MCM	TA110DU, TA200DU	EHTK210	\$ 90
4 - 400MCM	TA450DU185	ATK300HK	78
(2) 4 - 500MCM	TA450DU310	ATK300/2HK	120

Discount schedule ABA — A-contactor accessories

Discount schedule TAA — TA25

Discount schedule TBA — TA42, TA75

Discount schedule TCA — TA80, TA110, TA200, TA450

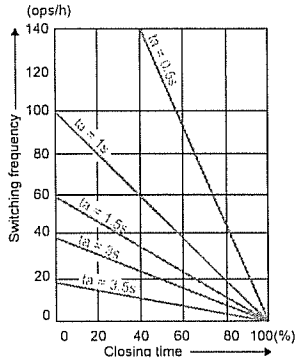
Technical data

TA25DU – TA450DU

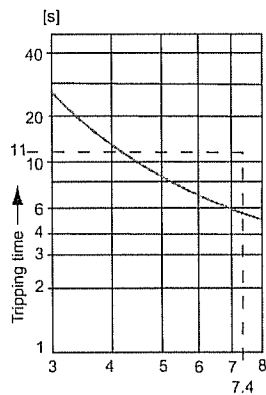
Thermal
Overload
relays

2

Intermittent duty



Switching frequency in relation to load factor.
 t_s : motor starting time.



Multiple of the setting current
TA thermal O/L relay cold-state tripping characteristics

Switching frequency:

To avoid untimely tripping, TA and T thermal O/L relays have been designed to withstand roughly 15 switching operations per hour with an approximately equal distribution between working and rest cycles.

In these conditions, the motor starting time must not exceed 1 second and the starting current must be lower than or equal to 6 times the motor I_n .

For intermittent operations, the diagram opposite specifies relay operating limits.

Example: Motor starting time: 1 sec.

Load factor: 40 %

Switching frequency: 60 ops./h according to diagram

For a higher number of operations and for load variations (e.g. frequent starting and braking), it is advisable to use CUSTORAPID® protection.

For motors subject to particularly severe operating conditions (e.g. locked rotor) it is advisable to use protection combined with a thermal O/L relay and the CUSTORAPID® system.

Protection of motors with long starting time

See electronic overload relay section, pages 2.21 - 2.32.

Mounting position

On a support at an angle of $\pm 30^\circ$ in relation to the vertical plane (standard position).

Other mounting positions possible, except mounting on a horizontal plane (in this case the tripping mechanism would be located above the bimetals).

Special version for EEx e motors

Consult factory.

Tripping limits at ambient temperatures varying by $\pm 20^\circ\text{C}$

Ambient temperature compensation

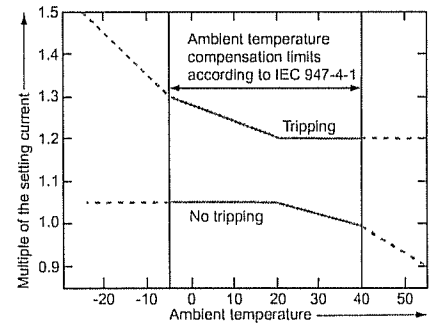
Thermal O/L relays are compensated against ambient temperature variations by a compensation bimetal which is sensitive to the ambient temperature.

Thermal O/L relays are designed to operate between -5°C and $+40^\circ\text{C}$ in compliance with standard IEC 947-4-1. For a wider range of -25°C to $+55^\circ\text{C}$ consult the graph opposite.

Example: tripping at -25°C . Tripping takes place before 1.5 times the setting current.

Resetting: TA25DU – TA450 DU thermal O/L relays have convertible manual/automatic resetting.

Delivery: in manual resetting mode.



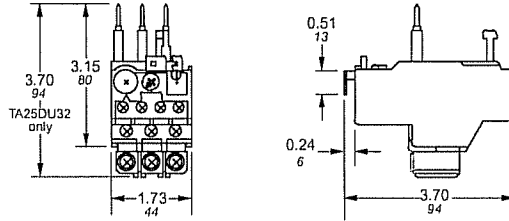
Approximate dimensions T25DU – TA42DU

Thermal
Overload
relays

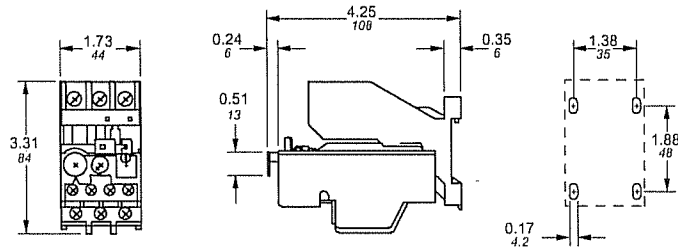


← 00.00 — Inches
00.00 — (Millimeters) →

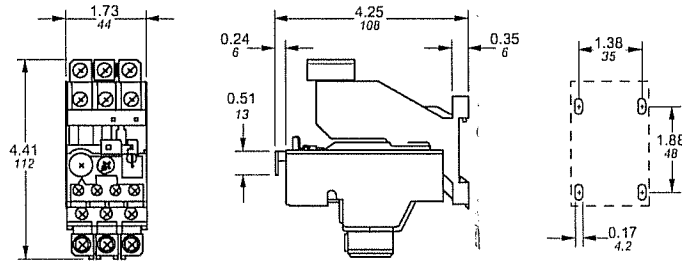
TA25DU



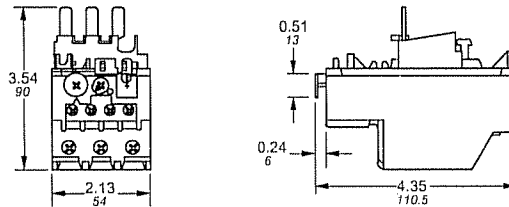
TA25DU & DB25



TA25DU & DB25/32



TA42DU



TA42DU / TA75DU & DB80

