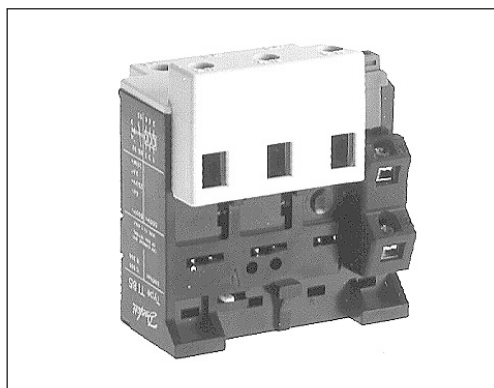**Description**

Thermal overload relays TI 80 are used with contactors CI 32-50 to give protection of squirrel-cage motors of 7.5 kW to 25 kW.
The relays have single-phase protection, i.e. accelerated release if phase drop-out occurs. This is particularly important for motors with delta-connected windings.

Other features of TI 80:
- stop/reset button
- manual/automatic reset
- test button
- double scale for direct start or Y/D start
- signal contact with changeover

Ordering

Thermal overload relays TI 80

Range		Max. fuse [1]				Code no.	Type
Motor-starter	Y/D-starter	gl, gL, gG		BS 88, type T			
A	A	type 1 A	type 2 A	type 1 A	type 2 A		
16 - 23	28 - 40	125	63	125	63	**047H1013**	
22 - 32	38 - 56	125	63	125	63	**047H1014**	**TI 80**
30 - 45	52 - 78	125	100	125	100	**047H1015**	
42 - 63	75 - 109		100		125	**047H1016**	

[1] To IEC 947-4 coordination types 1 and 2:
Coordination type 1: Any type of damage to the motor starter is permissible. If the motor starter is in an enclosure, no external damage to the enclosure is permissible. After a short-circuit the thermal overload relay shall be partially or wholly replaced.
Coordination type 2: No damage to the motor starter is permissible, but slight contact burning and welding is permissible.

Selection of thermal overload relay
The selection of a thermal overload relay must be based on the motor full load current and the method of starting:
- With direct start the range for motor starter is used.
- With star-delta start the range for Y/D starter is used.

Example:
Full load current: 45 A
- With direct start, the suitable motor starter range is 30-45 A, i.e. thermal overload relay **047H1015.**
- With star-delta start, the suitable Y/D starter range is 38-56 A, i.e. thermal overload relay **047H1014**.

Accessories for thermal overload relays TI 16C - 30C

		Description	Comments	Code no.
Clip-on marker		Clip-on markers	For thermal overload relays TI 16C, 25C and 30C (250-off)	**037H010566**
Assembly clips		Assembly clips	Vibration-proofing of motor starter with thermal overload relays TI 16C, 25C and 30C and contactors CI 6-30 (10-off).	**037H010266**
DIN holder		Holder for sep. mounting	Mounting of thermal overload relays TI 16C, 25C and 30C on 35 mm DIN rail	**047H016566**
Base for TI 16C 3-pole terminal block		3-pole terminal block	Separate mounting of thermal overload relays TI 16C	**613B1002**
		Base		**047L040566**
Base for TI 80		Base	Separate mounting of thermal overload relays TI 80 (20-off)	**047L045666**
Push button extension		Stop-pushbutton extens.	For thermal overload relays TI 16C-80 (3 mm)	**047L040666**
Current rail set		Current rail set	For direct mounting of thermal overload relay TI 80 on contactors	**037H010866**