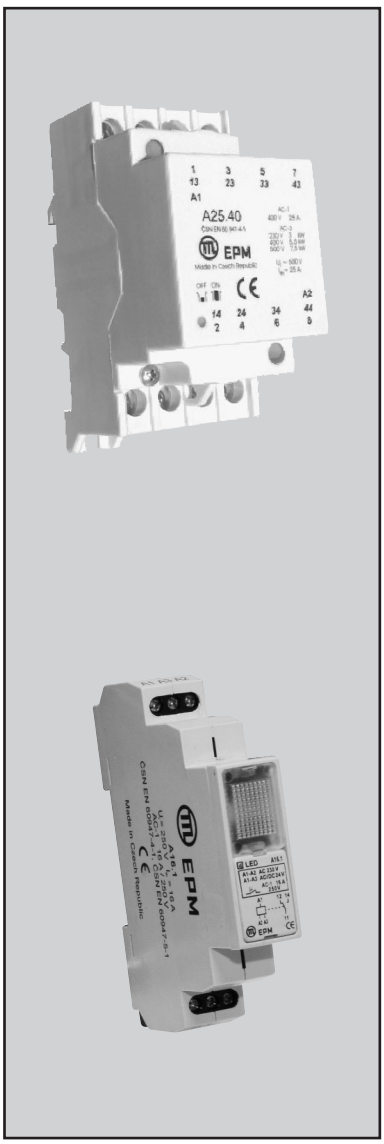
1.9 Contactors for household installations, series A

1.9.1 Description

Series A25 contactors are designed for frequent switching, mainly with non-inductive or slightly inductive loads, e. g. resistance heating devices. They are capable of operation in the circuits of three-phase induction motors. Owing to their design, they are suitable for household installations, e. g. side by side to miniature circuit breakers. Optionally, they can be equipped with a sealable enclosure (IP40D), which disables access to any terminal after being put on.
Series A25 contactors contain four poles in 4/0, 3/1, 2/2, 1/3, or 0/4 (NO/NC) configurations.
A16 contactor relays are capable of noiseless operation and are determined for switching in one-phase circuits. A red/green LED indicates the state of the changeover contact output. The built-in protecting diode and suppressing capacitor provide protection against over-voltage. Contactor relays have been approved acc. to EN 61812.

1.9.2 Table-No. 33 – Rating



Contactor type	A25	A16.1
Rated insulation voltage U_i [V]	500	250
Impulse withstand voltage U_{imp} [kV]	6	–
Conventional free air thermal current I_{th} [A]	25	16
Rated operational current I_e in utilization categories		
AC-7a at 400 V [A]	25	16
AC-7b at 400 V [A]	12	–
AC-15 at 400 V [A]	2	–
AC-15 at 230 V [A]	4	3
AC-1 at 250 V [A]		16
AC-3 at 400 V [A]	12	
Max. output power of controlled motor in AC-7b		
at 220-230 V [kW]	**3**	
at 380-400 V [kW]	**5,5**	
at 500 V [kW]	**7,5**	
Max. number of on-load op. cycles per hour in AC-7a	600	
Max. number of on-load op. cycles per hour in AC-7b	1 200	
Max. number of on-load op. cycles per hour in AC-15	3 600	
Electrical durability in AC-7a at 400 V, 25 A [op. cycles]	$0,1x10^6$	
Electrical durability in AC-7b at 400 V, 12 A [op. cycles]	$0,3x10^6$	
Electrical durability in AC-15 at 400 V, 2 A [op. cycles]	10^6	
Electrical durability in AC-15 at 230 V, 4 A [op. cycles]	$0,8x10^6$	$0,7x10^5$
Recommended fuse char. aM [A]	16	
Type of co-ordination with SCPD acc. to EN 60 947-4-1	2	
Mechanical durability [op. cycles]	$3x10^6$	$2x10^6$
Control circuit		
Coil control voltage at 50 Hz [V]	24..400	230*
[V] (AC/DC)		24**
Hold-in input power of AC control coil, ±10 % [VA/W]	4,6/1,6	
Pull-in input power of AC control coil, ±10 % [VA]	32,5	
Mass [kg]	0,28	0,058
Outline dimensions W × H × D [mm]	45x97x62	17,6x90x65
Outline dimensions incl. the enclosure W × H × D [mm]	52,5x115x62	
Degree of protection	IP20	IP20

* Terminal: A1 – A2
**Terminal: A1 – A3