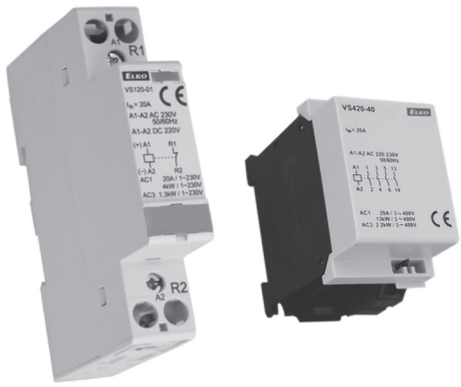
VS120, VS220, VS420, VS425, VS440, VS463 | Installation contactors



EAN code
see page 154

- For switching electric circuits, especially for resistave loads and three-phase induction motors:
  number of contacts VS120: 1
  number of contacts VS220: 2
  number of contacts VS420, VS425, VS440, VS463: 4
- It is produced in configuration of switching and breaking contacts:
  VS120: 10, 01
  VS220: 20, 11, 02
  VS420: 40, 31
  VS425: 40, 31, 22, 04
  VS440: 40, 31, 22, 04
  VS463: 40, 31, 22
- Protection IP20 - on request we deliver covers that ensure protection IP40 for all terminals.
- DIN rail or panel mounting.

Technical parameters	VS120	VS220	VS420	VS425	VS440	VS463
Rated insulation voltage (Ui):	230 V	230 V	415 V	440 V	440 V	440 V
Rated thermo-current I_{th} (in AC):	20 A	20 A	20 A	25 A	40 A	63 A
Switched operation						
AC-1 for 400 V, 3 phase:	x	x	13 kW	16 kW	26 kW	40 kW
AC-1 for 230 V:	4 kW, 1 phase	4 kW, 1 phase	7.5 kW, 3 phase	9 kW, 3 phase	16 kW, 3 phase	24 kW, 3 phase
AC-3 for 400 V, 3 phase:	x	x	2.2 kW	4 kW	11 kW	15 kW
AC-3 for 230 V:	1.3 kW only NO, 1 phase	1.3 kW only NO, 1 phase	1.1 kW, 3 phase	2.2 kW, 3 phase	5.5 kW, 3 phase	8.5 kW, 3 phase
AC-7a for 400 V, 3 phase:	x	x	13 kW	16 kW	26 kW	40 kW
AC-7a for 230 V:	4 kW, 1 phase	4 kW, 1 phase	7.5 kW, 3 phase	9 kW, 3 phase	16 kW, 3 phase	24 kW, 3 phase
AC-7b for 400 V, 3 phase:	x	x	2.2 kW	4 kW	11 kW	15 kW
AC-7b for 230 V:	1.3 kW only NO, 1 phase	1.3 kW only NO, 1 phase	1.1 kW, 3 phase	2.2 kW, 3 phase	5.5 kW, 3 phase	8.5 kW, 3 phase
AC-15 for 400 V, 1 phase:	4 A	4 A	4 A	4 A	4 A	4 A
AC-15 for 230 V, 1 phase:	6 A	6 A	6 A	6 A	6 A	6 A
DC1 U_e = 24 V:	20 A	20 A	20 A	25 A	40 A	63 A
DC1 U_e = 110 V:	6 A	6 A	2 A	6 A	4 A	4 A
DC1 U_e = 220 V:	0.6 A	0.6 A	0.5 A	0.6 A	1.2 A	1.2 A
Loadability of modular contactors see page 153						
The max. number of switching for max. load:	600 switch/hr.	600switch/hr.	600 switch/hr.	600 switch/hr.	600 switch/hr.	600 switch/hr.
Electrical life in 230 / 400 V						
AC-1- resistive load :	$0.2x10^6$	$0.2x10^6$	$0.2x10^6$	$0.2x10^6$	$0.1x10^6$	$0.1x10^6$
AC-3-power load:	$0.3x10^6$	$0.3x10^6$	$0.3x10^6$	$0.5x10^6$	$0.15x10^6$	$0.15x10^6$
AC-5a - high-intensity discharge lamp:	$0.1x10^6$ by 30 µF	$0.1x10^6$ by 30 µF	$0.3x10^6$ by 36 µF	$0.1x10^6$ by 36 µF	$0.1x10^6$ by 220 µF	$0.1x10^6$ by 330 µF
AC-5b - incandescent lamps :	$0.1x10^6$ by 2 kW	$0.1x10^6$ by 2 kW	$0.1x10^6$ by 2 kW	$0.1x10^6$ by 2 kW	$0.1x10^6$ by 4 kW	$0.1x10^6$ by 5 kW
AC-7a - resistive household devices:	$0.2x10^6$	$0.2x10^6$	$0.2x10^6$	$0.2x10^6$	$0.1x10^6$	$0.1x10^6$
AC-7b - inductive household devices:	$0.3x10^6$	$0.3x10^6$	$0.3x10^6$	$0.3x10^6$	$0.15x10^6$	$0.15x10^6$
Minimal load:	≥ 17 V, ≥ 50 mA	≥ 17 V, ≥ 50 mA	≥ 17 V, ≥ 50 mA	≥ 17 V, ≥ 50 mA	≥ 17 V, ≥ 50 mA	≥ 24 V, ≥ 100 mA
Short circuit protection with the fuse char. aM:	20 A	20 A	20 A	25 A	63 A	80 A
Coordination Type according EN 60 947-4-1:	2	2	2	2	2	2
Electrical strenght:	4 kV	4 kV	4 kV	4 kV	4 kV	4 kV
Contacts - max. cable size						
Solid conductor:	AWG 7 (10 mm^2)	AWG 7 (10 mm^2)	AWG 10 (2.5 mm^2)	AWG 7 (10 mm^2)	AWG 3 (25 mm^2)	AWG 3 (25 mm^2)
Stranded conductor:	6 mm^2	6 mm^2	2.5 mm^2	6 mm^2	16 mm^2	16 mm^2
Maximal torque:	1.2 Nm	1.2 Nm	1.2 Nm	1.2 Nm	3.5 Nm	3.5 Nm
Coil - max. cable size						
Solid conductor:	AWG 10 (2.5 mm^2)	AWG 10 (2.5 mm^2)	AWG 10 (2.5 mm^2)	AWG 10 (2.5 mm^2)	AWG 10 (2.5 mm^2)	AWG 10 (2.5 mm^2)
Stranded conductor:	2.5 mm^2	2.5 mm^2	2.5 mm^2	2.5 mm^2	2.5 mm^2	2.5 mm^2
Max. torque:	0.6 Nm	0.6 Nm	0.6 Nm	0.6 Nm	0.6 Nm	0.6 Nm
Operating						
Coil control voltage:	AC/DC 24 V, 230 V	AC/DC 24 V, 48 V, 110 V, 230 V	AC 12 V, 24 V, 48 V, 110 V, 230 V	AC/DC 24 V, 48 V, 110 V, 230 V	AC/DC 24 V, 110 V, 230 V	AC/DC 24 V, 48 V, 110 V, 230 V
Coil permanent supply +/- 10 %:	2.1 VA/2.1 W	2.1 VA/2.1 W	5 VA/1.5 W	2.6 VA/2.6 W *	5 VA/5 W	5 VA/5 W
Coil gear supply +/- 10 %:	2.1 VA/2.1 W	2.1 VA/2.1 W	30 VA/25 W	2.6 VA/2.6 W *	5 VA/5 W	5 VA/5 W
Mounting side-by-side:	max. 2 contactors**	max. 2 contactors**	max. 2 contactors**	max. 2 contactors**	max. 2 contactors**	max. 2 contactors**
Operational temperature:	-5 ... +55 °C (23.. 131 °F)					
Storing temperature:	-30... +80 °C (-22.. 176 °F)					
Weight:	120 g (4.2 oz.)	130 g (4.6 oz.)	170 g (6 oz.)	213 g (7.5 oz.)	400 g (14 oz.)	400 g (14 oz.)
Dimensions:	17.5 x 85 x 60 mm (0.7″x 3.35″x 2.4″)	17.5 x 85 x 60 mm (0.7″x 3.35″x 2.4″)	35 x 62.5 x 57 mm (1.4″x 2.7″x 2.24″)	35 x 85 x 60 mm (1.4″x 3.35″x 2.4″)	53.3 x 84 x 60 mm (2.1″x 3.31″x 2.4″)	53.3 x 84 x 60 mm (2.1″x 3.31″x 2.4″)
Standards:	IEC 60947-4-1, IEC 60947-5-1, IEC 61095, EN 60947-4-1, EN 60947-5-1, EN 61095, VDE 0660					

* 3.8 VA/3.8 W for -04 version of contacts

** Note: In case several contactors are mounted close to each other, you need to use a installation spacer between every other contactor.