



- For switching electric circuits, especially for resistive loads and 3-phase induction motors
- Number of contacts: VS120 - 1, VS220 - 2, VS325, VS340, VS363 - 3, VS425, VS440, VS463 - 4
- It is produced in configuration of switching and breaking contacts:  
 VS120: 10, 01 VS220: 20, 11, 02  
 VS325: 30 VS425: 40, 31, 22, 13 04  
 VS340: 30 VS440: 40, 31, 22, 04  
 VS363: 30 VS463: 40, 31, 22
- It is possible to connect auxiliary contacts VSK to contactors VS425, VS440, VS463

EAN code see page 38

**Technical parameters**

	VS120	VS220	VS325/VS425	VS340/VS440	VS363/VS463
Rated insulation voltage (Ui):	IEC: 440 V ; UL/CSA: 480 V				
Rated operational voltage (Ue):	IEC: 230 V ; UL/CSA: 240 V		IEC: 400 V ; UL/CSA: 480 V		
Rated thermo-current I <sub>m</sub> (in AC):	20 A	20 A	25 A	40 A	63 A
Rated frequency	50/60 Hz	50/60 Hz	50/60 Hz	50/60 Hz	50/60 Hz

**Switched operation**

AC-1 for 400 V, 3 phase:	x	x	16 kW	26 kW	40 kW
AC-1 for 230 V:	4 kW, 1 phase	4 kW, 1 phase	9 kW, 3 phase	16 kW, 3 phase	24 kW, 3 phase
AC-3 for 400 V, 3 phase:	x	x	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	2.2 kW, 3 phase	5.5 kW, 3 phase	8.5 kW, 3 phase
AC-7a for 400 V, 3 phase:	x	x	16 kW	26 kW	40 kW
AC-7a for 230 V:	4 kW, 1 phase	4 kW, 1 phase	9 kW, 3 phase	16 kW, 3 phase	24 kW, 3 phase
AC-7b for 400 V, 3 phase:	x	x	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	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
AC-15 for 230 V, 1 phase:	6 A	6 A	6 A	6 A	6 A
DC1 U <sub>e</sub> = 24/110/220 V:	20/6/0.6 A	20/6/0.6 A	25/6/0.6 A	40/4/1.2 A	63/4/1.2 A
Loadability of modular contactors see page 58					
The max. number of switching for max. load:	600 switch/hr.	600 switch/hr.	600 switch/hr.	600 switch/hr.	600 switch/hr.

**Electrical life in 230/400 V**

AC-1- resistive load :	200.000	200.000	200.000	100.000	100.000
AC-3-power load:	300.000	300.000	500.000	500.000	150.000
AC-5a - high-intensity discharge lamp:	100.000 by 30 µF	100.000 by 30 µF	100.000 by 36 µF	100.000 by 220 µF	100.000 by 330 µF
AC-5b - incandescent lamps:	100.000 by 2 kW	100.000 by 2 kW	100.000 by 2 kW	100.000 by 4 kW	100.000 by 5 kW
AC-7a - resistive household devices:	200.000	200.000	200.000	100.000	100.000
AC-7b - inductive household devices:	300.000	300.000	300.000	150.000	150.000
Minimal load:	≥ 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	25 A	63 A	80 A
Coordination Type according EN 60 947-4-1:	2	2	2	2	2
Dielectric strenght:	4 kV	4 kV	4 kV	4 kV	4 kV

**Contacts - max. cable size**

Solid conductor:	AWG 7 (10 mm <sup>2</sup> )	AWG 7 (10 mm <sup>2</sup> )	AWG 10 (10 mm <sup>2</sup> )	AWG 10 (25 mm <sup>2</sup> )	AWG 10 (25 mm <sup>2</sup> )
Stranded conductor:	AWG 8 (6 mm <sup>2</sup> )	AWG 8 (6 mm <sup>2</sup> )	AWG 8 (6 mm <sup>2</sup> )	AWG 4 (16 mm <sup>2</sup> )	AWG 4 (16 mm <sup>2</sup> )
Maximal torque:	1.2 Nm (10.62 lbf.in)	1.2 Nm (10.62 lbf.in)	1.2 Nm (10.62 lbf.in)	3.5 Nm (30.95 lbf.in)	3.5 Nm (30.95 lbf.in)

**Coil - max. cable size**

Solid conductor:	AWG 14 (2.5 mm <sup>2</sup> )	AWG 14 (2.5 mm <sup>2</sup> )	AWG 14 (2.5 mm <sup>2</sup> )	AWG 14 (2.5 mm <sup>2</sup> )	AWG 14 (2.5 mm <sup>2</sup> )
Stranded conductor:	AWG 14 (2.5 mm <sup>2</sup> )	AWG 14 (2.5 mm <sup>2</sup> )	AWG 14 (2.5 mm <sup>2</sup> )	AWG 14 (2.5 mm <sup>2</sup> )	AWG 14 (2.5 mm <sup>2</sup> )
Max. torque:	0.6 Nm (5.31 lbf.in)	0.6 Nm (5.31 lbf.in)	0.6 Nm (5.31 lbf.in)	0.6 Nm (5.31 lbf.in)	0.6 Nm (5.31 lbf.in)

**Operating**

Coil control voltage:	AC/DC 24 V, 120 V, 230 V	AC/DC 24 V, 48 V, 120 V, 230 V	AC/DC 24 V, 48 V, 120 V, 230 V	AC/DC 24 V, 120 V, 230 V	AC/DC 24 V, 48 V, 120 V, 230 V
Coil permanent supply +/- 10 %:	2.1 VA/2.1 W	2.1 VA/2.1 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	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**
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.)	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 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:	UL 60947-4-1A, C22.2 No. 60947-4-1A-07, IEC/EN 61095, IEC/EN 60947-4-1				

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

\*\* Note: If several contactors are mounted close together a gap of 9 mm must be maintained between every other contactor.

\*\*\* HP rating: VS120 & VS220: 1-phase 1 HP|240 Vac, 1/3 HP|120 Vac; PD. B300, P300

VS325 & VS425: 1-phase 1 HP|240 Vac, 1/3 HP|120 Vac; 3-phase 3 HP|240 Vac, 5 HP|460 Vac; PD. B300, P300

VS340 & VS440: 1-phase 3 HP|240 Vac, 1 HP|120 Vac; 3-phase 7 HP|240 Vac, 15 HP|460 Vac; PD. B300, P300

VS363 & VS463: 1-phase 5 HP|240 Vac, 2 HP|120 Vac; 3-phase 10 HP|240 Vac, 20 HP|460 Vac; PD. B300, P300