

2-way solenoid valves series 540 normally open

Features

- Compact size
- No disassembly necessary for soldering
-  marking according to PED
- 



540 RA

Accessories

- Actuation coil and cable assemblies available for various voltages, see 'Coils ESC and Cable Assemblies'

Capacity data - A1 refrigerants

Type	Nominal Capacity Q_n (kW)									Kv-Value (m ³ /h)	Δp Min (bar)
	Liquid										
	R134a	R22	R404A R507	R407C	R450A	R513A	R448A	R449A	R452A		
540 RA 8	36.3	39.3	25.2	37.3	33.8	32.2	34.0	33.3	25.8	2.3	0.05
540 RA 9	76.2	82.5	52.9	78.4	71.0	67.7	71.3	69.8	54.2	4.8	
540 RA 12	85.7	92.8	59.5	88.1	79.9	76.1	80.2	78.6	61.0	5.4	
540 RA 16	139.1	150.5	96.5	142.9	129.5	123.5	130.1	127.4	98.9	8.8	
540 RA 20	202.6	219.3	140.7	208.3	188.7	179.9	189.6	185.7	144.1	12.8	

Type	Nominal Capacity Q_n (kW)									Kv-Value (m ³ /h)	Δp Min (bar)
	Hot Gas										
	R134a	R22	R404A R507	R407C	R450A	R513A	R448A	R449A	R452A		
540 RA 8	16.7	20.5	17.4	21.4	16.6	17.3	23.2	22.9	20.1	2.3	0.05
540 RA 9	35.1	43.1	36.5	44.9	34.7	36.2	48.5	47.8	41.9	4.8	
540 RA 12	39.4	48.4	41.1	50.5	39.0	40.7	54.5	53.8	47.2	5.4	
540 RA 16	64.0	78.5	66.6	81.9	63.5	66.3	88.9	87.6	76.9	8.8	
540 RA 20	93.2	114.4	97.1	119.3	92.4	96.4	129.3	127.5	111.8	12.8	

Type	Nominal Capacity Q_n (kW)									Kv-Value (m ³ /h)	Δp Min (bar)
	Suction Gas										
	R134a	R22	R404A R507	R407C	R450A	R513A	R448A	R449A	R452A		
540 RA 8	4.2	5.6	4.6	5.2	3.7	4.0	5.1	5.0	4.0	2.3	0.05
540 RA 9	8.8	11.7	9.7	10.9	7.8	8.4	10.6	10.5	8.3	4.8	
540 RA 12	9.9	13.1	10.9	12.3	8.8	9.4	11.9	11.8	9.3	5.4	
540 RA 16	16.0	21.3	17.7	19.9	14.3	15.3	19.4	19.2	15.2	8.8	
540 RA 20	23.3	31.0	25.7	29.0	20.8	22.3	28.3	27.9	22.1	12.8	

Capacity data - A2L refrigerants

Type	Nominal Capacity Q_n (kW)															Kv-Value (m ³ /h)	Δp Min (bar)
	Liquid					Hot Gas					Suction Gas						
	R454A	R454C	R1234yf	R1234ze	R455A	R454A	R454C	R1234yf	R1234ze	R455A	R454A	R454C	R1234yf	R1234ze	R455A		
540 RA 8	32.7	29.0	26.6	32.6	30.7	23.5	20.6	15.1	14.9	22.5	5.3	4.5	3.6	3.4	4.8	2.3	0.05
540 RA 9	68.7	60.9	55.9	68.5	64.5	49.1	43.0	31.4	31.1	47.0	11.2	9.4	7.6	7.1	9.9	4.8	0.05
540 RA 12	77.3	68.6	62.9	77.0	72.5	55.2	48.4	35.4	35.0	52.8	12.5	10.6	8.5	8.0	11.2	5.4	0.05
540 RA 16	-	-	-	124.9	-	-	-	-	57.0	-	-	-	-	13.1	-	8.8	0.05
540 RA 20	-	-	-	182.0	-	-	-	-	82.9	-	-	-	-	19.0	-	12.8	0.05

Note 1: Nominal capacities at +38°C condensing temperature. +4°C evaporating temperature. 0.15 bar pressure drop between valve inlet and outlet in liquid applications (For hot gas applications 1 bar pressure drop and +18 °C suction gas temperature); Subcooling 1 K. For selection of other operating condition, please use Copeland Select software.

Selection table

Type		Part No.	Connection Solder / ODF	
			mm	Inch
540 RA 8	T5	046 265		5/8
540 RA 9	T5	046 266		5/8
	T7	046 268	22	7/8
540 RA 12	T7	046 269	22	7/8
540 RA 16	T9	046 270		1-1/8
540 RA 20	T11	047 953	35	1-3/8

Options:

- Actuation coils available for various voltages, see 'Coils ESC and Cable Assemblies'

Accessories and spare parts for solenoid valves

Gasket kits

Description	Type	Part No.
110RB	KS 30040-2	801 232
200RB/200RH	KS 30039-1	801 233
240RA8	KS 30061-1	801 234
240RA9/12	KS 30062-1	801 235
240RA16	KS 30065-1	801 236
240RA20	KS 30097-1	801 237

Description	Type	Part No.
Service tool for 110 RB, 240 RA, 540 RA	X 11981 - 1	027 451

Repair kits

Description	Type	Part No.
110RB	KS 30040-1	801 206
200RB	KS 30039/ KS 30109	801 205
240RA8	KS 30061	801 262
240RA9	KS 30062	801 263
240RA12	KS 30063	801 264
240RA16	KS 30065	801 200
240RA20	KS 30097	801 216