OS

Oil Separator

General information

A1 A2L

The OS Oil Separators are used for multiple compressor racks in supermarkets and air conditioning systems for use with HCFCs, HFCs and their lubricants.

Features

- Three different construction styles:
  - OSH hermetic style
  - OST with top flange
  - OSB with bottom flange and supporter
- Solid Copper ODF connections
- Stainless steel needle valve and floater
- Temperature range TS: -10…+150 °C
- Max. allowable pressure: 31 bar
- Permanent magnet to filter metal particles out of the oil circulation
- Corrosion resistant epoxy powder painting
- CE marking according to PED 2014/68/EU
- Comply with c UL us LISTED standard (SA46030)



OSH OST OSB

Type code

OS	⌂	-	⌂	⌂⌂

Product Name

Oil Separator Ö

	Construction
H	Hermetic
T	Top Flange
B	Bottom Flange with supporter

Nominal Shell Diameter

4	~ 10 cm
6	~ 15 cm

	ODF Connection
04	1/2”
05	5/8“ (16 mm)
07	7/8“ (22 mm)
09	1-1/8“
11	1-3/8“ (35 mm)
13	1-5/8“
17	2-1/8” (54 mm)

Quick selection – A1 / A2L Refrigerants

Type	Part No.	Connection		Released Refrigerants		Markings			Vol. (l)
		(mm)	(Inch)	A1	A2L	Conformity Assessment	CE	c UL us LISTED	
OSH-404	881598		1/2“	R134a R404A R407C R448A R449A	R1234ze	Cat. I / Mod. A	√ (acc. PED)	√	2.0
OSH-405	881599	16 mm	5/8“						2.4
OSH-407	881600	22 mm	7/8“						2.8
OSH-409	881792		1-1/8“						3.0
OSH-411	881794	35 mm	1-3/8“						3.6
OSH-413	881856		1-5/8“						3.6
OSH-611	881940	35 mm	1-3/8“			Cat.II / Mod. D1	CE0036	√	6.5
OSH-613	881953		1-5/8“						7.9
OSH-642	889022	42 mm							7.9
OSH-617	881970	54 mm	2-1/8“						7.9
OST-404	881860		1/2“	R450A R452A R507		Cat. I / Mod. A	√ (acc. PED)	√	1.8
OST-405	881861	16 mm	5/8“						2.6
OST-407	881862	22 mm	7/8“						3.2
OST-409	881863		1-1/8“						3.8
OST-411	881938	35 mm	1-3/8“						3.8
OST-413	881939		1-5/8“						3.8
OSB-613	881971		1-5/8“	R513A		Cat.II / Mod. D1	CE0036	√	7.8
OSB-617	881972	54 mm	2-1/8“						7.8

NOTE: For assistance with selection, please contact your local Copeland Sales offices.

Quick selection – A2L Refrigerants

Type	Part No.	Connection		Released Refrigerants	Markings			Vol. (l)
		(mm)	(Inch)	A2L	Conformity Assessment	CE	c UL us LISTED	
OSH-404-L	881601		1/2“	R444B R447A R454A R454C R455A R1234yf	Cat.II / Mod. D1	CE0036	√	2.0
OSH-405-L	881602	16 mm	5/8“					2.4
OSH-407-L	881603	22 mm	7/8“					2.8
OSH-409-L	881604		1-1/8“					3.0
OSH-411-L	881605	35 mm	1-3/8“					3.6
OSH-413-L	881606		1-5/8“					3.6
OST-404-L	881611		1/2“		Cat.II / Mod. D1	CE0036	√	1.8
OST-405-L	881612	16 mm	5/8“					2.6
OST-407-L	881613	22 mm	7/8“					3.2
OST-409-L	881614		1-1/8“					3.8
OST-411-L	881615	35 mm	1-3/8“					3.8
OST-413-L	881616		1-5/8“					3.8

NOTE:Several types on request. For assistance with selection, please contact your local Copeland Sales offices.

Selection Table Accessory

Type	Part No.	Description	Illustration
Gasket	808800	Gasket set for OSB/OST	

Selection table - A1 / A2L Refrigerants (continued)

Type	Part No.	Nominal Capacity Qn (kW)								
		R134a	R407C	R404A/ R507	R448A	R449A	R450A	R513A	R452A	R1234ze*
OSH-404	881598	4.9	7	7.3	7.4	7.9	4.6	4.7	*tbd*	3.9
OSH-405	881599	13.1	18.7	19.4	18.8	20.1	11.7	12.1	*tbd*	9.9
OSH-407	881600	19.7	28.1	29	29.9	32.1	18.6	19.2	*tbd*	15.8
OSH-409	881792	26.2	37.4	38.7	40.9	43.9	25.4	26.3	*tbd*	21.6
OSH-411	881794	32.8	46.8	48.4	49.3	52.9	30.7	31.7	*tbd*	26
OSH-413	881856	45.9	65.5	67.8	68.7	73.6	42.7	44.1	*tbd*	36.2
OSH-611	881940	36.1	51.5	53.3	60.6	65	37.7	38.9	*tbd*	32
OSH-613	881953	45.9	65.5	67.8	71.7	76.8	44.5	46	*tbd*	37.8
OSH-642	889022	45.9	65.5	67.8	71.7	76.8	44.5	46	*tbd*	37.8
OSH-617	881970	73.8	105.3	108.9	108.7	116.5	67.5	69.8	*tbd*	57.4
OST-404	881860	4.9	7	7.3	7.4	7.9	4.6	4.7	*tbd*	3.9
OST-405	881861	13.1	18.7	19.4	18.8	20.1	11.7	12.1	*tbd*	9.9
OST-407	881862	19.7	28.1.	29	29.9	32.1	18.6	19.2	*tbd*	15.8
OST-409	881863	26.2	37.4	38.7	40.9	43.9	25.4	26.3	*tbd*	21.6
OST-411	881938	32.8	46.8	48.4	49.3	52.9	30.7	31.7	*tbd*	26
OST-413	881939	45.9	65.5	67.8	68.7	73.6	42.7	44.1	*tbd*	36.2
OSB-613	881971	45.9	65.5	67.8	71.7	76.8	44.5	46	*tbd*	37.8
OSB-617	881972	73.8	105.5	108.9	108.7	116.5	67.5	69.8	*tbd*	57.4

NOTE: *) A2L acc. ASHRE

Selection table - A2L Refrigerants (continued)

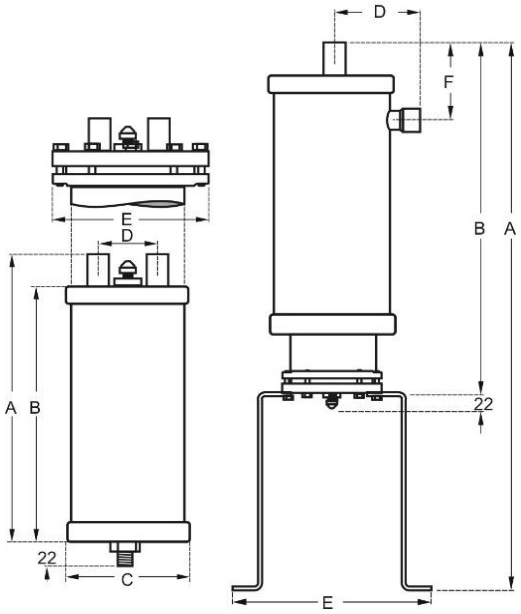
Type	Part No.	Nominal Capacity Qn (kW)					
		R454A	R454C	R455A	R1234yf		
OSH-404-L	881601	6.5	5.7	6.5	4.5		
OSH-405-L	881602	15	13.1	14.9	10.4		
OSH-407-L	881603	26.5	23.2	26.4	18.3		
OSH-409-L	881604	36.3	31.8	36.1	25.1		
OSH-411-L	881605	43.7	38.3	43.6	30.3		
OSH-413-L	881607	46.7	40.9	46.5	32.3		
OST-404-L	881611	6.5	5.7	6.5	4.5		
OST-405-L	881612	15	13.1	14.9	10.4		
OST-407-L	881613	26.5	23.2	26.4	18.3		
OST-409-L	881614	36.3	31.8	36.1	25.1		
OST-411-L	881615	43.7	38.3	43.6	30.3		
OST-413-L	881616	46.7	40.9	46.5	32.3		

NOTE: The nominal capacities are based on: Evaporating Temperature +4°C (dew point), Condensing Temperature +38°C (bubble point). For other operating conditions use the quick selection in this document or "Select" tool (www.copeland.com/en-gb). For assistance with selection, please contact your local Copeland Sales offices.

Technical Data

Max. allowable Pressure PS	31 bar
Max. Test Pressure PT Cat. I Cat. II	 34.1 bar 44.3 bar
Temperature range TS	-10…+150 °C
Initial required Oil Charge OS…-4…(-L): OS…-6…:	 0.5 l 0.6 l
Hazard category / Conf. Assessment OS…-4…: OS…-6…: OS...-4…-L:	(PED 2014/68/EU) Cat. I / Modul A → A1 Cat. II / Modul D1 → A1 Cat. II / Modul D1 → A2L
Released Refrigerants **Fluid group II** OS…-4… OS…-6... **Fluid group I** OSH-4…/OST-4… NOTE: Fluid Group acc. to PED 2014/68/EU. *) A2L acc. ASHRE	R134a, R404A, R407C, R448A, R449A, R450A, R452A, R507, R513A, R1234ze* A1 R444B, R447A, R454A, R454C, R455A, R1234yf A2L
Markings OS…-4…: OS…-6… / OS…-4…-L all types	 CE CE 0036 cULus LISTED (SA46030)

Paint	Epoxy powder paint
Protection	minimum 500 hours salt spray test
Solder connections	copper, ODF
Shell material	steel
Package	Individual packaged Master box quantity: 6 pcs



Dimension (mm)

Type	Part No.	Type	Part No.	Connection (PED)		Vol.	(mm)					
				(Inch)	(mm)	(l)	A	B	C	D	E	F
OSH-404	**881598**	**OSH-404-L**	**881601**	1/2“		2.0	274	249	102	48	-	-
OSH-405	**881599**	**OSH-405-L**	**881602**	5/8“	16	2.4	335	297	102	48	-	-
OSH-407	**881600**	**OSH-407-L**	**881603**	7/8“	22	2.8	381	345	102	48	-	-
OSH-409	**881792**	**OSH-409-L**	**881604**	1-1/8“		3.0	413	369	102	48	-	-
OSH-411	**881794**	**OSH-411-L**	**881605**	1-3/8“	35	3.6	497	449	102	48	-	-
OSH-413	**881856**	**OSH-413-L**	**881606**	1-5/8“		3.6	505	449	102	48	-	-
OSH-611	**881940**			1-3/8“	35	6.5	400	356	153	76	-	-
OSH-613	**881953**			1-5/8“		7.9	483	432	153	76	-	-
OSH-642	**889022**				42	7.9	483	432	153	76		
OSH-617	**881970**			2-1/8“	54	7.9	495	432	153	76	-	-
OST-404	**881860**	**OST-404-L**	**881611**	1/2“		1.8	266	237	102	48	140	-
OST-405	**881861**	**OST-405-L**	**881612**	5/8“	16	2.6	381	339	102	48	140	-
OST-407	**881862**	**OST-407-L**	**881613**	7/8“	22	3.2	456	415	102	48	140	-
OST-409	**881863**	**OST-409-L**	**881614**	1-1/8“		3.8	540	492	102	48	140	-
OST-411	**881938**	**OST-411-L**	**881615**	1-3/8“	35	3.8	543	492	102	48	140	-
OST-413	**881939**	**OST-413-L**	**881616**	1-5/8“		3.8	552	492	102	48	140	-
OSB-613	**881971**			1-5/8“		7.8	740	511	153	111	273	137
OSB-617	**881972**			2-1/8“	54	7.8	745	516	153	118	273	141

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