

Overview of oil types

Introduction

This document presents an overview of oil types and their technical specifications for Danfoss Commercial Compressors. Each Danfoss oil is specifically selected and tuned with additives for optimal performance in the indicated compressor series. When oil top-up is needed, always use the oil type as listed in the below table. Otherwise compressor warranty may be voided.

Compressors and oil types

	Compressor series	Refrigerant ¹⁾	Factory charged oil type		Oil type for top-up
Maneurop reciprocating compressors	NTZ	R404A, R452A, R454C, R455A	Polyolester	175PZ	175PZ
	MT	R22	Mineral	160P	160P
	MTZ	R404A, R507, R134a, R407A, R407C, R407F, R448A, R449A, R452A, R454A, R454C, R455A, R513A	Polyolester	175PZ	175PZ
	VTZ	R404A, R507, R134a, R407A, R407C, R407F	Polyolester	160PZ	175PZ
Scroll compressors	HRM/HLM/HCM	R22	Alkylbenzene	160ABM	160ABM
	HRP/HLP	R407C	Polyvinylether	160HV	160HV/320HV
	HCP	R407C	Polyvinylether	320HV	320HV
	HRH/HLH/HLJ	R410A	Polyvinylether	160HV	160HV/320HV
	HCJ/DCJ	R410A	Polyvinylether	320HV	320HV
	MLM015-076	R22	Alkylbenzene	160ABM	160ABM
	HRH/HLH/HLJ version A	R410A, R454B	Polyolester	215PZ	215PZ
	HCJ/DCJ version A	R410A, R454B	Polyolester	215PZ	215PZ
	HRH/HLH/HLJ version B	R410A, R454B	Polyolester	215PZ	215PZ
	HCJ/DCJ version B	R410A, R454B	Polyolester	215PZ	215PZ
	MLZ(evolution A)	R22, R404A, R134a, R407A, R407C, R407F, R448A, R449A, R452A, R513A	Polyolester	215PZ	215PZ
	MLZ(evolution B)	R22, R404A, R134a, R407A, R407C, R407F, R448A, R449A, R452A, R513A, R454C, R455A	Polyolester	215PZ	215PZ
	LLZ	R404A, R507	Polyvinylether	160HV	160HV/320HV
	LLZ(evolution A)	R404A, R507, R452A, R448A, R449A	Polyolester	215PZ	215PZ
	LLZ(evolution B)	R404A, R507, R452A, R448A, R449A, R454C, R455A	Polyolester	215PZ	215PZ
	SM	R22	Mineral	160P	160P
	SY185	R22, R407C, R134a, R513A	Polyolester	320SZ	320SZ
	SY240-380	R22	Polyolester	320SZ	320SZ
	SZ	R407C, R134a, R513A	Polyolester	160SZ	160SZ
	DSF	R32	Polyolester	185SL	185SL
	DSH	R410A, R452B, R454B	Polyolester	160SZ	160SZ
	DSN	R290	Polyolester	160SZ	160SZ
	SH	R410A	Polyolester	160SZ	160SZ
	PSH	R410A/R454B	Polyolester	160SZ	160SZ
	DSG	R1234ze(E), R515B	Polyolester	160SZ	160SZ
	PSG	R600a, R1234ze(E), R515B	Polyolester	320SZ	320SZ
	VZH028/035/044	R410A	Polyvinylether	160HV	160HV/320HV
	VZH028/035/044 version M	R410A, R452B, R454B	Polyolester	215PZ	215PZ
	VLZ028/035/044/065	R404A/R448A/R449A	Polyolester	215PZ	215PZ
	VZH052/065	R410A	Polyvinylether	160HV	160HV/320HV
	VZH052/065 version M	R410A, R452B, R454B	Polyolester	215PZ	215PZ
	VZH088/117/170	R410A, R452B, R454B	Polyolester	160SZ	160SZ
	VZF088/117/170	R32	Polyolester	185SL	185SL
	VZN	R290	Polyolester	160SZ	160SZ

Note: For compressors that are factory-charged with 160HV (PVE32), it is allowable to top-up the compressors with 320HV (PVE68). There will be no reliability risks even with 100% 320HV, yet performance may drop some. Danfoss provides 320HV as accessories.

Ordering information

Code n°	Type	Description	Application	Packaging ²⁾	
				Type	Qty.
7754001	160P	Mineral oil, 160P, 2 liter can	SM, MT	Multipack	8
7754023	160SZ	POE lubricant, 160SZ, 1 liter can	SZ, SH, PSH, DSH, VZH088-117-170,DSN,VZN	Multipack	12
120Z0571	160SZ	POE lubricant, 160SZ, 2.5 liter can	SZ, SH, PSH, DSH, VZH088-117-170,DSN,VZN	Multipack	4
120Z0572	320SZ	POE lubricant, 320SZ, 2.5 liter can	SY185 SY240-380	Multipack	4
7754121	320SZ	POE lubricant, 320SZ, 1 liter can	SY185 SY240-380	Multipack	12
7754002	160P	Mineral oil, 160P, 5 liter can	SM, MT	Multipack	4
120Z5034	320HV	PVE lubricant, 320HV (FVC68D), 1 liter can	DCJ, HRP, HLP, HCP, HRH, HLH, HLJ, HCJ, HHP, MLZ/LLZ, VZH028-035-044, VZH052-065,	Single pack	1
120Z0639	175PZ	POE lubricant 175PZ, 2,5 liter can	MTZ, NTZ, VTZ	Multipack	4
120Z0638	175PZ	POE lubricant 175PZ, 1 liter can	MTZ, NTZ, VTZ	Multipack	12
120Z0648	215PZ	POE lubricant 215PZ ((RL46HB), 1 liter can	MLZ evolution A,B LLZ evolution A,B ,VLZ	Multipack	12
120Z0750	185SL	POE lubricant 185SL,1 liter can	DSF,VZF	Multipack	12

¹⁾ Please consult guideline for qualified models

²⁾ Multipacks refer to deliveries from Danfoss Commercial Compressors to central Danfoss stocks or direct deliveries to OEM customers. These products may be available as single packs for end customers.

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