

PHAS Series High Ambient Condensing Units Powered by Copeland Scroll



- Robust high efficiency Copeland Scroll compressors
- Generously sized high ambient condensers coated with "Patton Coat" coil and fin protection
- High efficiency external rotor fan assemblies
- Fan speed control fitted for balanced operation
- Dual pressure control with "Convertible Reset"
- Liquid line drier & sight glass fitted on all models
- Oil separator fitted and charged on all models
- Suction accumulator fitted on low temp models
- Liquid injection valve fitted on low temp models
- Fully wired complete with; isolator switch, contactor, overload and control breaker all in IP67 enclosure

MEDIUM TEMP

8

12

hp

R404A MED TEMP

Model	Nom. hp	Ambient Temp. °C	Evaporating Temp °C (Watts)				
			-15	-10	-5	0	5
PHAS800T-2F-ZB-LSE	8.0	35	11290	13610	16110	18760	21630
		38	10660	12900	15270	17840	20590
		40	10230	12400	14730	17200	19840
		43	9530	11620	13860	16190	18690
PHAS900T-2F-ZB-LSE	9.0	35	12960	15410	18070	21030	24220
		38	12310	14630	17170	19950	22970
		40	11880	14110	16540	19240	22180
		43	11160	13290	15600	18120	20900
PHAS1000T-2F-ZB-LSE	10.0	35	15290	18270	21520	25050	28900
		38	14530	17350	20470	23840	27460
		40	13980	16740	19730	23010	26470
		43	13150	15790	18610	21680	24960
PHAS1200T-2F-ZB-LSE	12.0	35	17350	20740	24520	28600	32920
		38	16450	19660	23190	27050	31150
		40	15860	18870	22290	26050	29990
		43	14930	17790	20950	24420	28140

R448/449A MED TEMP

Model	Nom. hp	Ambient Temp. °C	Evaporating Temp °C (Watts)				
			-15	-10	-5	0	5
PHAS800T-2F-ZB-LSE	8.0	35	10420	12710	15310	18230	21470
		38	9990	12220	14730	17540	20690
		40	9720	11890	14340	17100	20150
		43	9280	11380	13750	16410	19370
PHAS900T-2F-ZB-LSE	9.0	35	12030	14800	17810	21120	24710
		38	11440	14130	17050	20270	23750
		40	11010	13650	16530	19670	23060
		43	10370	12930	15740	18770	22060
PHAS1000T-2F-ZB-LSE	10.0	35	14220	17500	21070	25020	29350
		38	13510	16740	20220	24050	28260
		40	13000	16190	19640	23390	27500
		43	12210	15350	18720	22390	26360
PHAS1200T-2F-ZB-LSE	12.0	35	16410	20160	24330	28990	34060
		38	15570	19220	23270	27780	32680
		40	15040	18600	22580	26990	31780
		43	14190	17640	21480	25740	30350

R134a MED TEMP

Model	Nom. hp	Ambient Temp. °C	Evaporating Temp °C (Watts)				
			-10	-5	0	5	10
PHAS800T-2F-ZB-LSE	8.0	35	8000	9910	12110	14610	17420
		38	7700	9550	11700	14130	16870
		40	7510	9320	11410	13800	16490
		43	7200	8950	10980	13300	15910
PHAS900T-2F-ZB-LSE	9.0	35	9150	11340	13880	16740	19960
		38	8810	10930	13390	16200	19330
		40	8580	10650	13070	15800	18900
		43	8240	10240	12580	15250	18220
PHAS1000T-2F-ZB-LSE	10.0	35	10500	13020	15930	19250	22940
		38	10100	12560	15370	18600	22200
		40	9850	12230	15000	18170	21700
		43	9450	11750	14430	17500	20950
PHAS1200T-2F-ZB-LSE	12.0	35	11920	14820	18150	21950	26070
		38	11430	14240	17440	21100	25180
		40	11130	13820	16980	20580	24560
		43	10650	13230	16250	19720	23610

- Ratings based on; 20deg return gas / 0k subcooling
- Refer to back page for further technical information

LOW TEMP

7.5 15 hp

R404A LOW TEMP

Model	Nom. hp	Ambient Temp. °C	Evaporating Temp °C (Watts)				
			-35	-30	-25	-20	-15
PHAS750T-2F-ZF-LSAE	7.5	35	5060	6230	7600	9100	10710
		38	4850	5970	7260	8680	10210
		40	4720	5780	7020	8400	9870
		43	4520	5520	6680	7960	9360
PHAS1000T-2F-ZF-LSAE	10.0	35	6690	8250	9970	11890	13990
		38	6390	7870	9500	11300	13290
		40	6200	7630	9190	10910	12830
		43	5880	7220	8690	10310	12100
PHAS1300T-2F-ZF-LSAE	13.0	35	8450	10350	12440	14780	17370
		38	8090	9900	11880	14080	16530
		40	7850	9600	11510	13610	15980
		43	7450	9110	10910	12900	15110
PHAS1500T-2F-ZF-LSAE	15.0	35	10070	12370	14960	17870	21090
		38	9620	11810	14280	17010	20070
		40	9330	11440	13820	16440	19370
		43	8840	10840	13060	15570	18310

R448/449A LOW TEMP

Model	Nom. hp	Ambient Temp. °C	Evaporating Temp °C (Watts)				
			-35	-30	-25	-20	-15
PHAS750T-2F-ZF-LSAE	7.5	35	4470	5670	7040	8580	10330
		38	4290	5440	6750	8240	9880
		40	4170	5280	6560	7990	9590
		43	3980	5040	6240	7600	9110
PHAS1000T-2F-ZF-LSAE	10.0	35	5960	7520	9320	11340	13600
		38	5730	7240	8950	10890	13060
		40	5570	7040	8710	10590	12690
		43	5330	6740	8330	10110	12110
PHAS1300T-2F-ZF-LSAE	13.0	35	7350	9240	11400	13860	16650
		38	7120	8930	11010	13370	16050
		40	6960	8720	10740	13010	15600
		43	6740	8410	10320	12490	14970
PHAS1500T-2F-ZF-LSAE	15.0	35	8760	11050	13720	16770	20230
		38	8470	10660	13220	16170	19480
		40	8270	10400	12890	15740	18970
		43	7990	10010	12370	15100	18170

- Ratings based on; 20deg return gas / 0k subcooling
- Refer to back page for further technical information

ZF Series compressors fitted to Low Temperature models have been specifically designed and optimised for frozen food cooling. Pre-fitted liquid injection allows a wide operating envelope “while ensuring compressor is kept cool” Combined with its compliance scroll mechanism “providing a high tolerance to liquid slugging” make them an extremely reliable and high performing solution for demanding applications.



TECHNICAL DATA

APPLICATION	UNIT MODEL	COMPRESSOR			CONDENSER			RECEIVER VOLUME (Ltrs)	CONNECTIONS		UNIT DIMENSION (mm)			Kg	dB(A) @3.0 mtrs
		Model	HP	MCC (Amps)	Fans (mm)	AMPS (Total)	AIR (L/s)		Liquid (Inch)	Suction (Inch)	L	W	H		
MEDIUM TEMP	PHAS800T-2F-ZB-LSE	ZB58KQE-TFD	8.0	15.9	2x500	3.6	2360	14	5/8	1-1/8	1350	1000	850	208	68
	PHAS900T-2F-ZB-LSE	ZB66KQE-TFD	9.0	17.5	2x500	3.6	2360	14	5/8	1-1/8	1350	1000	850	210	68
	PHAS1000T-2F-ZB-LSE	ZB76KQE-TFD	10.0	20.4	2x500	3.6	2950	14	5/8	1-3/8	1350	1000	1010	212	68
	PHAS1200T-2F-ZB-LSE	ZB88KQE-TFD	12.0	21.3	2x500	3.6	3610	14	5/8	1-3/8	1350	1000	1110	228	68
LOW TEMP	PHAS750T-2F-ZF-LSAE	ZF25KQE-TFD	7.5	16.0	2x400	1.7	1670	8	1/2	1-1/8	1000	800	750	178	65
	PHAS1000T-2F-ZF-LSAE	ZF34KQE-TFD	10.0	25.0	2x500	3.6	2360	12	5/8	1-3/8	1350	1000	850	228	68
	PHAS1300T-2F-ZF-LSAE	ZF41KQE-TFD	13.0	29.0	2x500	3.6	2360	12	5/8	1-3/8	1350	1000	850	239	69
	PHAS1500T-2F-ZF-LSAE	ZF49KQE-TFD	15.0	30.0	2x500	3.6	2950	14	5/8	1-5/8	1350	1000	1010	274	69

- All compressors are 3ph/50hz (400-420V) / All fan motors are 1ph/50hz (220-240V)
- Noise level ratings are "free field" based at a distance of 3m from source and are given as a guide only.

DIMENSIONS

