



WONGSO FRASCOLD BLAST FREEZER CONDENSING UNIT

Made with the best quality and high standard of quality control, WONGSO introduces a new product "WFBF Series" Condensing Unit.

WONGSO "WFBF Series" has been designed for air blast freezer. Start with capacity 5 HP to 40 HP using 2 Stage Semi Hermetic Frascold Italy Compressor, believe that product will suit customer's requirement for industrial.

*Competent
solution for all
commercial
refrigeration.*

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Wongso Frascold Blast Freezer Technical Data

Two stage semi-hermetics reciprocating compressors.



Model.	Comp	Cylinders		Displacement (1)		Oil Charge (2)	Electrical Data (3)			Line connection						Dimension (4)			Weight
							Max Oper- ating current	Max absorbed current	Locked rotor current	Suction		Discharge		Liquid					
							400 V		400 V	inch	mm	inch	mm	inch	mm	L	W	H	
WFBBF 05	S5-26.16Y	2	2	25,2	16,4	2,9	14,0	8,3	35,5	1 3/8	35	7/8	22	5/8	16	1180	1100	1100	225
WFBBF 07	S7-27.19Y	2	2	26,9	19,1	2,9	18,0	9,5	47,0	1 3/8	35	7/8	22	5/8	16	1180	1100	1100	227
WFBBF 10	2V10-42.29Y	2	2	41,9	29,4	4,0	23,0	13,5	53,9	1 3/8	35	1 1/8	28,6	5/8	16	1200	1100	1100	318
WFBBF 15	2Z15-60.30Y	4	2	58,8	29,4	7,2	31,0	17,0	74,8	1 5/8	42	1 3/8	35	7/8	22	1200	1100	1100	385
WFBBF 20	2Z20-72.36Y	4	2	70,8	35,4	7,2	37,0	20,9	107,0	1 5/8	42	1 3/8	35	7/8	22	1250	1100	1150	410
WFBBF 25	2Z25-84.42Y	4	2	83,8	41,9	7,2	45,0	25,8	118,0	1 5/8	42	1 3/8	35	7/8	22	1250	1100	1150	445
WFBBF 30	2Z30-102.51Y	4	2	102,9	51,5	7,2	53,0	30,9	133,0	1 5/8	42	1 3/8	35	7/8	22	1250	1100	1150	454
WFBBF 40	2Z40-123.62Y	4	2	123,1	61,6	7,2	71,9	41	159,2	1 5/8	42	1 3/8	35	7/8	22	1250	1100	1150	465

(1) Conversion factor for 60Hz = 1.2

(2) Oil charge POE 32 cSt. We always recommend using the heating element.

(3) The reported value refers to operation at 50Hz.

Operation at 60Hz multiply by 1.2. The max operating current remains unchanged. The size of the contactors, cables and fuses must take into account the maximum operating temperature and the maximum power absorbed. AC3 category contactors

4) Dimension without condenser (Remote Condenser)

Low Temperature Performance Data

Performance data using R404A (50 Hz) with liquid subcooling.

Model	Compressor	Cond. Temp. [°C]	①	Evaporating temperature [°C]									
				-25	-30	-35	-40	-45	-50	-55	-60	-65	-70
WFBBF 05	S5-26.16Y	30	Qo	12109	10168	8438	6913	5585	4444	3478	2674	2017	1488
			Pe	6,0	5,52	5,03	4,54	4,06	3,59	3,14	2,71	2,32	1,96
		35	Qo	11868	9976	8290	6804	5508	4391	3441	2642	1978	1429
			Pe	6,51	5,93	5,36	4,8	4,26	3,75	3,26	2,81	2,4	2,03
		40	Qo	11627	9781	8138	6688	5423	4329	3393	2598	1925	
			Pe	7,04	6,36	5,71	5,08	4,49	3,92	3,4	2,92	2,5	
		45	Qo	11391	9588	7984	6569	5333	4261	3337	2543		
			Pe	7,58	6,82	6,08	5,38	4,73	4,12	3,56	3,06		
		50	Qo	11172	9405	7836	6452	5242	4188	3274			
			Pe	8,16	7,31	6,49	5,72	5,0	4,34	3,75			
		55	Qo		9247	7705	6347	5157	4118				
			Pe		7,86	6,95	6,11	5,33	4,62				
WFBBF 07	S7-27.19Y	30	Qo	13050	10954	9085	7436	6001	4768	3725	2860	2155	1592
			Pe	6,55	6,05	5,53	5,0	4,47	3,94	3,43	2,96	2,52	2,13
		35	Qo	12804	10755	8929	7319	5916	4709	3683	2825	2115	1535
			Pe	7,09	6,5	5,89	5,29	4,7	4,12	3,58	3,07	2,61	2,21
		40	Qo	12557	10554	8770	7198	5826	4643	3634	2782	2067	
			Pe	7,64	6,95	6,27	5,6	4,94	4,32	3,73	3,2	2,72	
		45	Qo	12314	10353	8608	7071	5731	4572	3579	2732		
			Pe	8,21	7,44	6,67	5,93	5,21	4,54	3,91	3,34		
		50	Qo	12084	10158	8448	6944	5631	4495	3516			
			Pe	8,84	7,96	7,11	6,29	5,51	4,78	4,11			
		55	Qo	11882	9982	8300	6822	5534	4416				
			Pe	9,54	8,56	7,62	6,71	5,87	5,08				

Wongso Frascold Blast Freezer Low Temperature Performance Data

Performance data using R404A (50 Hz) with liquid subcooling.



Model	Compressor	Cond. Temp. [°C]	①	Evaporating temperature [°C]										
				-25	-30	-35	-40	-45	-50	-55	-60	-65	-70	
WFBBF 10	2V10-42.29Y	30	Qo	18763	15836	13216	10896	8865	7111	5620	4373	3350	2528	
			Pe	9,84	9,05	8,25	7,46	6,68	5,92	5,19	4,51	3,87	3,29	
		35	Qo	18411	15562	13012	10753	8772	7057	5590	4351	3318	2465	
			Pe	10,72	9,78	8,86	7,95	7,08	6,24	5,45	4,72	4,06	3,46	
		40	Qo	18066	15292	12809	10608	8676	6997	5551	4318	3271		
			Pe	11,63	10,55	9,49	8,48	7,51	6,59	5,74	4,97	4,28		
		45	Qo	17733	15028	12608	10462	8576	6930	5503	4270			
			Pe	12,59	11,36	10,17	9,04	7,97	6,98	6,07	5,25			
		50	Qo		14779	12415	10318	8472	6855	5442				
			Pe		12,23	10,91	9,66	8,5	7,43	6,45				
		55	Qo		14561	12242	10186	8372	6776					
			Pe		13,21	11,75	10,38	9,11	7,95					
WFBBF 15	2Z15-60.30Y	30	Qo	25786	21746	18132	14934	12138	9727	7678	5968	4567	3444	
			Pe	13,19	12,17	11,11	10,04	8,97	7,93	6,92	5,97	5,1	4,32	
		35	Qo	25295	21365	17849	14737	12012	9653	7639	5939	4524	3357	
			Pe	14,33	13,12	11,89	10,67	9,48	8,34	7,26	6,25	5,34	4,54	
		40	Qo	24806	20980	17558	14528	11870	9562	7578	5885	4450		
			Pe	15,51	14,1	12,71	11,34	10,03	8,79	7,63	6,57	5,62		
		45	Qo	24329	20599	17266	14312	11718	9456	7497	5806			
			Pe	16,74	15,14	13,57	12,06	10,63	9,28	8,04	6,92			
		50	Qo		20240	16985	14101	11563	9341	7401				
			Pe		16,25	14,51	12,85	11,29	9,84	8,51				
		55	Qo			16743	13916	11423	9230					
			Pe			15,58	13,76	12,06	10,49					
WFBBF 20	2Z20-72.36Y	30	Qo	31405	26470	22057	18154	14743	11803	9310	7231	5534	4178	
			Pe	15,69	14,5	13,31	12,11	10,93	9,76	8,61	7,5	6,43	5,41	
		35	Qo	30833	26025	21725	17920	14591	11713	9258	7193	5478	4071	
			Pe	17,06	15,64	14,23	12,86	11,52	10,23	9,0	7,83	6,73	5,7	
		40	Qo	30271	25582	21390	17680	14429	11610	9190	7133	5396		
			Pe	18,47	16,81	15,2	13,65	12,17	10,76	9,44	8,21	7,08		
		45	Qo	29726	25147	21056	17435	14257	11492	9103	7048			
			Pe	19,95	18,05	16,23	14,51	12,88	11,36	9,95	8,66			
		50	Qo		24734	20733	17191	14079	11361	8995				
			Pe		19,39	17,37	15,46	13,68	12,04	10,54				
		55	Qo			20445	16967	13906	11222					
			Pe			18,67	16,58	14,64	12,87					
WFBBF 25	2Z25-84.42Y	30	Qo	37070	31252	26050	21449	17428	13962	11019	8563	6553	4940	
			Pe	18,44	16,99	15,52	14,02	12,54	11,09	9,69	8,36	7,14	6,04	
		35	Qo	36404	30731	25659	21172	17245	13851	10954	8514	6485	4814	
			Pe	20,05	18,34	16,62	14,92	13,26	11,67	10,16	8,76	7,48	6,36	
		40	Qo	35748	30211	25264	20886	17050	13725	10870	8442	6388		
			Pe	21,71	19,73	17,78	15,88	14,05	12,31	10,69	9,21	7,89		
		45	Qo	35112	29701	24870	20594	16844	13582	10764	8341			
			Pe	23,45	21,2	19,01	16,9	14,9	13,03	11,3	9,73			
		50	Qo	34520	29217	24488	20304	16631	13424	10635				
			Pe	25,32	22,79	20,36	18,04	15,86	13,83	11,99				
		55	Qo		28796	24147	20037	16424	13260					
			Pe		24,59	21,89	19,35	16,97	14,79					
WFBBF 30	2Z30-102.51Y	30	Qo	46243	38811	32206	26402	21364	17052	13416	10399	7937	5957	
			Pe	23,18	21,27	19,34	17,4	15,48	13,62	11,83	10,14	8,57	7,15	
		35	Qo	45530	38251	31784	26102	21167	16932	13345	10344	7858	5807	
			Pe	25,36	23,06	20,77	18,54	16,38	14,32	12,39	10,61	9,01	7,59	
		40	Qo	44826	37688	31353	25787	20950	16791	13250	10261	7745		
			Pe	27,62	24,92	22,29	19,76	17,36	15,12	13,05	11,18	9,53		
		45	Qo	44148	37136	30919	25461	20716	16627	13129	10146			
			Pe	29,99	26,89	23,91	21,09	18,44	16,0	13,8	11,83			
		50	Qo		36617	30501	25137	20474	16446	12982				
			Pe		29,02	25,68	22,55	19,66	17,02	14,66				
		55	Qo			30138	24844	20243	16261					
			Pe			27,71	24,25	21,09	18,23					
WFBBF 40	2Z40-123.62Y	30	Qo	53408	44891	37302	30618	24806	19821	15611	12113	9254	6952	
			Pe	27,08	24,88	22,64	20,40	18,17	16,00	13,91	11,93	10,09	8,43	
		35	Qo	52538	44207	36787	30251	24562	19672	15522	12043	9158	6775	
			Pe	29,61	26,95	24,30	21,71	19,20	16,80	14,55	12,47	10,59	8,94	
		40	Qo	51678	43521	36260	29866	24296	19496	15404	11941	9023		
			Pe	32,22	29,09	26,05	23,11	20,32	17,70	15,29	13,11	11,19		
		45	Qo	50848	42846	35731	29468	24010	19296	15255	11802			
			Pe	34,94	31,35	27,89	24,61	21,54	18,70	16,14	13,86			
		50	Qo	50084	42210	35220	29703	23714	19075	15076				
			Pe	37,83	33,76	29,89	26,26	22,90	19,84	17,11				
		55	Qo	49463	41673	34772	28712	23431	18849					
			Pe	41,03	36,45	32,15	28,15	24,48	21,18					

①
 Qo [W] = Cooling capacity
 Pe [kW] = Power consumption
 Suction gas temperature 20 C without liquid sub-cooling.

The performance refers to European standard EN12900 and with operation at 50 Hz. All published data is subject to change.

This field requires limitation of the suction temperature.