

QBE HGBV 50Hz

General Description

	QBE003	QBE004	QBE005	QBE006	QBE007	QBE008	QBE009	QBE012	QBE014	QBE020	QBE025	QBE005 3Ph	QBE006 3Ph	QBE007 3Ph
Refrigerant	R407C	R407C	R407C	R407C	R407C	R407C	R407C	R407C	R407C	R407C	R407C	R407C	R407C	R407C
Type compressor	Rotary	Rotary	Rotary	Rotary	Rotary	Rotary	Rotary	Scroll	Scroll	Scroll	Scroll	Reciprocating	Reciprocating	Reciprocating
N° of circuit/compressor	1/1	1/1	1/1	1/1	1/1	1/1	1/1	1/1	1/1	1/1	1/1	1/1	1/1	1/1
Expansion device	Expansion valve	Mechanical / Electronic	Mechanical / Electronic	Mechanical / Electronic	Mechanical / Electronic	Mechanical / Electronic	Mechanical / Electronic	Mechanical / Electronic	Mechanical / Electronic	Mechanical / Electronic	Mechanical / Electronic	Mechanical / Electronic	Mechanical / Electronic	Mechanical / Electronic
Hot gas bypass valve type	Mechanical / Electronic	Mechanical / Electronic	Mechanical / Electronic	Mechanical / Electronic	Mechanical / Electronic	Mechanical / Electronic	Mechanical / Electronic	Mechanical / Electronic	Mechanical / Electronic	Mechanical / Electronic	Mechanical / Electronic	Mechanical / Electronic	Mechanical / Electronic	Mechanical / Electronic
Fan type	Axial	Axial	Axial	Axial	Axial	Axial	Axial	Axial	Axial	Axial	Axial	Axial	Axial	Axial
Fan regulation	On/Off	On/Off	On/Off	On/Off	On/Off	On/Off	On/Off	On/Off	On/Off	On/Off	On/Off	On/Off	On/Off	On/Off
Pump	STD	STD	STD	STD	STD	STD	STD	STD	STD	STD	STD	STD	STD	STD
Pump type	Peripheral	Peripheral	Peripheral	Peripheral	Peripheral	Centrifugal	Centrifugal	Centrifugal	Centrifugal	Centrifugal	Centrifugal	Peripheral	Peripheral	Peripheral
Standard pressure of the pump	P3	P3	P3	P3	P3	P2	P2	P2	P2	P2	P2	P3	P3	P3
Water gauge	STD	STD	STD	STD	STD	STD	STD	STD	STD	STD	STD	STD	STD	STD
Low pressure switch	STD	STD	STD	STD	STD	STD	STD	STD	STD	STD	STD	STD	STD	STD
Hydraulic circuit type	Atmospheric / Open circ.	Atmospheric / Open circ.	Atmospheric / Open circ.	Atmospheric / Open circ.	Atmospheric / Open circ.	Atmospheric / Open circ.	Atmospheric / Open circ.	Atmospheric / Open circ.	Atmospheric / Open circ.	Atmospheric / Open circ.	Atmospheric / Open circ.	Atmospheric / Open circ.	Atmospheric / Open circ.	Atmospheric / Open circ.
Automatic water bypass	STD	STD	STD	STD	STD	STD	STD	STD	STD	STD	STD	STD	STD	STD
Water level sensor	STD	STD	STD	STD	STD	STD	STD	STD	STD	STD	STD	STD	STD	STD
Controller type	Microprocessor	Microprocessor	Microprocessor	Microprocessor	Microprocessor	Microprocessor	Microprocessor	Microprocessor	Microprocessor	Microprocessor	Microprocessor	Microprocessor	Microprocessor	Microprocessor
IP protection degree	IP40	IP40	IP40	IP40	IP40	IP44	IP44	IP44	IP44	IP44	IP44	IP44	IP44	IP44

Ambient air=25°C - Inlet water temperature=20°C - Outlet water temperature=15°C - Ethylene glycol=0%

	QBE003	QBE004	QBE005	QBE006	QBE007	QBE008	QBE009	QBE012	QBE014	QBE020	QBE025	QBE005 3Ph	QBE006 3Ph	QBE007 3Ph	
Cooling capacity	[kW]	2,74	3,51	4,28	5,21	6,21	8,16	10,11	12,73	16,22	21,02	23,11	5,23	6,08	7,01
Compressors power input	[kW]	0,49	0,71	0,86	1,22	1,76	1,49	2,09	2,81	2,54	4,87	1,22	1,71	2,29	
Total power input	[kW]	0,99	1,21	1,36	1,72	2,26	2,30	3,40	4,12	4,31	5,98	1,73	2,21	2,90	
Total absorbed current	[A]	4,45	6,45	7,22	9,01	11,31	8,28	11,31	14,14	13,80	25,80	5,85	6,15	7,20	
Energy efficiency (pump excluded)	EER/COP	4,43	4,19	4,32	3,85	3,29	4,21	4,09	4,90	4,64	4,10	3,86	3,30	2,80	
Water flow	[l/h]	471	604	736	897	1068	1404	1739	2190	2790	3615	3975	900	1046	1206
Evaporator pressure drop	[kPa]	287	261	248	215	181	235	209	222	188	217	215	185	153	
Maximum power input (total)	[kW]	1,5	1,8	2,0	2,5	3,0	3,8	4,9	5,8	6,6	10,0	2,4	3,0	3,7	
Maximum absorbed current (total)	[A]	7,5	9,1	10,4	12,6	14,4	17,7	21,1	25,9	28,1	38,0	9,0	10,4	12,0	
Starting current	[A]	22,1	26,1	34,2	39,2	55,2	34,2	42,2	44,2	62,7	78,3	89,3	22,9	25,9	
Fan power	[kW]	0,13	0,13	0,13	0,13	0,13	0,31	0,31	0,31	0,77	0,77	0,14	0,14	0,14	
Fan current	[A]	0,65	0,65	0,65	0,65	0,65	1,20	1,20	1,20	1,70	1,70	0,38	0,38	0,38	
Number of fans	[#]	1	1	1	1	1	1	1	1	1	1	1	1	1	
Standard pump type	---	P3	---	---	P3	---	P2	---	---	P2	---	---	P3	---	
Standard pump power input	[kW]	0,37	0,37	0,37	0,37	0,37	1,00	1,00	1,00	1,00	1,45	1,45	0,37	0,37	
Standard pump absorbed current	[A]	2,50	2,50	2,50	2,50	2,50	2,00	2,00	2,00	2,00	2,60	2,60	2,50	2,50	
Power supply	[VPh/Hz]	---	---	---	230/1/50	---	400/3/50	---	---	400/3/50	---	---	400/3/50	---	
IP protection degree	---	IP40	---	---	IP44	---	IP44	---	---	IP44	---	---	IP44	---	
Refrigerant	---	---	---	---	R407C	---	---	---	---	R407C	---	---	R407C	---	
Compressor type	---	---	---	---	Coaxial	---	Brazed plates	---	---	Scroll	---	---	Reciprocating	---	
Evaporator type	---	---	---	---	---	---	---	---	---	Brazed plates	---	---	Brazed plates	---	
Condenser type	---	---	---	---	Microchannel	---	---	---	---	Microchannel	---	---	Microchannel	---	
N° of compressors	[#]	1	1	1	1	1	1	1	1	1	1	1	1	1	
N° of refrigerant circuits	[#]	1	1	1	1	1	1	1	1	1	1	1	1	1	
Air flow	[m³/h]	2,200	2,200	2,500	2,500	2,500	4,800	4,800	5,000	5,500	5,500	2,500	2,500	2,500	
Sound pressure level at 10 m in free field	[dba]	46	46	46,0	46,0	46	49	49,0	49,0	49,0	49,0	49	46,0	46,0	
Water connections diameter	[inch]	1/2"	1/2"	1/2"	1/2"	1/2"	1"	1"	1"	1"	1"	1/2"	1/2"	1/2"	
Water capacity	[dm³]	25	25	25	25	25	90	90	90	90	90	25	25	25	
Tank capacity	[dm³]	720	720	720	720	720	1004	1004	1004	1004	1004	720	720	720	
Width	[mm]	670	670	670	670	670	753	753	753	753	753	670	670	670	
Depth	[mm]	680	680	680	680	680	1257	1257	1257	1257	1257	680	680	680	
Height	[kg]	85	88	92	95	100	235	240	245	255	255	92	95	100	
P3 Pump power input - optional	[kW]	---	---	---	---	---	1,60	1,60	1,60	1,60	0,75	---	---	---	
P3 Pump absorbed current - optional	[A]	---	---	---	---	---	1,90	1,90	1,90	1,90	2,50	---	---	---	
P5 Pump power input - optional	[kW]	0,55	0,55	0,55	0,55	0,55	0,75	0,75	0,75	0,75	0,90	0,55	0,55	0,55	
P5 Pump absorbed current - optional	[A]	6,20	6,20	6,20	6,20	6,20	2,50	2,50	2,50	2,50	2,60	6,20	6,20	6,20	

Ambient air=32°C - Inlet water temperature=12°C - Outlet water temperature=7°C - Ethylene glycol=0%

	QBE003	QBE004	QBE005	QBE006	QBE007	QBE008	QBE009	QBE012	QBE014	QBE020	QBE025	QBE005 3Ph	QBE006 3Ph	QBE007 3Ph	
Cooling capacity	[kW]	1,95	2,55	3,07	3,78	4,72	5,81	7,34	9,14	11,74	15,34	16,95	3,59	4,29	5,05
Compressors power input	[kW]	0,55	0,79	0,93	1,30	1,82	1,62	2,18	2,96	2,76	4,02	1,40	1,66	2,14	
Total power input	[kW]	1,00	1,29	1,43	1,80	2,32	2,29	3,49	4,27	4,53	6,24	1,70	2,16	2,65	
Total absorbed current	[A]	5,65	6,79	7,56	9,35	11,55	8,44	11,34	14,14	13,80	25,80	5,85	6,15	7,20	
Energy efficiency (pump excluded)	EER/COP	2,87	2,78	2,89	2,65	2,42	3,02	2,54	2,80	3,33	3,20	2,86	2,70	2,39	
Water flow	[l/h]	439	439	528	651	813	999	1.262	1.571	2.000	2.639	618	728	869	
Evaporator pressure drop	[kPa]	319	300	289	265	221	261	245	251	230	260	295	271	247	
Maximum power input (total)	[kW]	1,5	1,8	2,0	2,5	3,0	3,8	4,9	5,8	6,6	10,0	2,4	3,0	3,7	
Maximum absorbed current (total)	[A]	7,5	9,1	10,4	12,6	14,4	17,7	21,1	25,9	28,1	38,0	9,0	10,4	12,0	
Starting current	[A]	22,1	26,1	34,2	39,2	55,2	34,2	42,2	44,2	62,7	78,3	89,3	22,9	25,9	
Fan power	[kW]	0,13	0,13	0,13	0,13	0,13	0,31	0,31	0,31	0,77	0,77	0,14	0,14	0,14	
Fan current	[A]	0,65	0,65	0,65	0,65	0,65	1,20	1,20	1,20	1,70	1,70	0,38	0,38	0,38	
Number of fans	[#]	1	1	1	1	1	1	1	1	1	1	1	1	1	
Standard pump type	---	P3	---	---	P3	---	P2	---	---	P2	---	---	P3	---	
Standard pump power input	[kW]	0,37	0,37	0,37	0,37	0,37	1,00	1,00	1,00	1,00	1,45	1,45	0,37	0,37	
Standard pump absorbed current	[A]	2,50	2,50	2,50	2,50	2,50	2,00	2,00	2,00	2,00	2,60	2,60	2,50	2,50	
Power supply	[VPh/Hz]	---	---	---	230/1/50	---	400/3/50	---	---	400/3/50	---	---	400/3/50	---	
IP protection degree	---	IP40	---	---	IP44	---	IP44	---	---	IP44	---	---	IP44	---	
Refrigerant	---	---	---	---	R407C	---	---	---	---	R407C	---	---	R407C	---	
Compressor type	---	---	---	---	Coaxial	---	Brazed plates	---	---	Scroll	---	---	Reciprocating	---	
Evaporator type	---	---	---	---	---	---	---	---	---	Brazed plates	---	---	Brazed plates	---	
Condenser type	---	---	---	---	Microchannel	---	---	---	---	Microchannel	---	---	Microchannel	---	
N° of compressors	[#]	1	1	1	1	1	1	1	1	1	1	1	1	1	
N° of refrigerant circuits	[#]	1	1	1	1	1	1	1	1	1	1	1	1	1	
Air flow	[m³/h]	2,200	2,200	2,500	2,500	2,500	4,800	4,800	5,000	5,500	5,500	2,500	2,500	2,500	
Sound pressure level at 10 m in free field	[dba]	46	46	46,0	46,0	46	49	49,0	49,0	49,0	49,0	49	46,0	46,0	
Water connections diameter	[inch]	1/2"	1/2"	1/2"	1/2"	1/2"	1"	1"	1"	1"	1"	1/2"	1/2"	1/2"	
Water capacity	[dm³]	25	25	25	25	25	90	90	90	90	90	25	25	25	
Tank capacity	[dm³]	720	720	720	720	720	1004	1004	1004	1004	1004	720	720	720	
Width	[mm]	670	670	670	670	670	753	753	753	753	753	670	670	670	
Depth	[mm]	680	680	680	680	680	1257	1257							