

XV8.0KX Variable Speed Drive Compressor R600a 220-240V 50/60Hz


General

Code number	108H7710			
Electronic unit (attached) - XV-AEO/Freq.	105N5022, 50 pcs: 105N5023			
Inputs: Modbus, thermostat, frequency signal				
Electronic unit (detached) - XV-Frequency	105N5052, 50 pcs: 105N5053			
Input: Frequency signal (connector cable assembly req'd)				
Electronic unit (attached, PFC) - XV-AEO/Freq.	105N5320, 50 pcs: 105N5321			
Inputs: Modbus, thermostat, frequency signal				
Approvals	EN 60335-2-34 w. Annex AA (VDE), GB 4706.17 (CCC/CQC)			
Compressors on pallet	175			
Remarks: In AEO (Adaptive Energy Optimizing) speed mode the XV compressor will always adapt its speed to the actual cooling demand.				
PFC = power factor correction according to EN 61000-3-2:2014				

Application

Application	LBP		
Frequency Hz	50	60	
Evaporating temperature °C	-35 to 0 (-5/-10)	-35 to 0 (-5/-10)	
Voltage range V	160 - 264	160 - 264	
Max. condensing temperature continuous (short) °C	60 (70)	60 (70)	
Max. winding temperature continuous (short) °C	125 (135)	125 (135)	

Cooling requirements

Frequency Hz	50			60		
Application	LBP	MBP	HBP	LBP	MBP	HBP
32°C	S	—	—	S	—	—
38°C	S	—	—	S	—	—
43°C	S	—	—	S	—	—

Remarks: HST capable (High starting torque, start against differential pressure)
All measured performance data include losses caused by electronic unit.

Features

Speed range rpm	1000 - 4000
Protections	current / speed / temperature
External speed control	frequency signal 5V, 0-200Hz

Motor

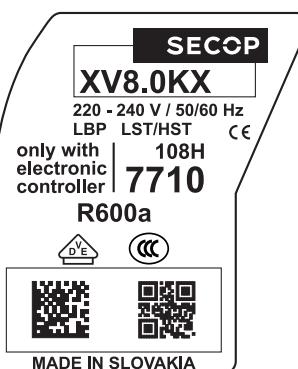
Motor type	permanent magnet
LRA (rated after 4 sec. UL984)	A electronic cut off
Maximum current A	2.5
Resistance, all 3 windings (25°C) Ω	10.0

Design

Displacement cm³	7.7
Oil quantity (type) cm³	115 (5 cSt mineral)
Maximum refrigerant charge g	150
Free gas volume in compressor cm³	900
Weight kg	4.8

Dimensions

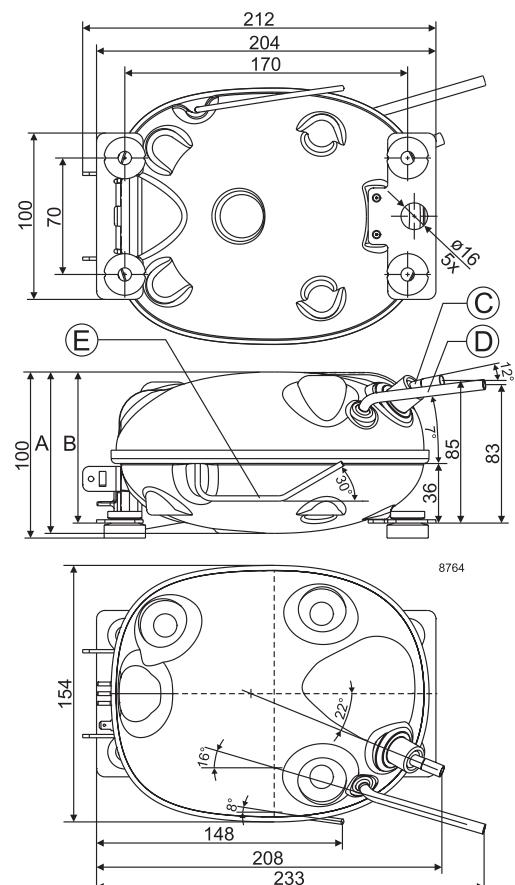
Height mm	A	97.0
Suction connector location/I.D. mm angle	B	91.0
Process connector location/O.D. mm angle	C	6.2 12°
Discharge connector location/O.D. mm angle	D	6.0 7°
Connector tolerance mm	E	3.2 30°
		Cu-plated steel Rubber plug



yellow warning label
is placed separately



- S = Static cooling normally sufficient
- O = Oil cooling
- F₁ = Fan cooling 1.5 m/s (compressor compartment temperature equal to ambient temperature)
- F₂ = Fan cooling 3.0 m/s necessary
- SG = Suction gas cooling normally sufficient
- = not applicable in this area



1000 rpm**EN 12900 Household/CECOMAF**, condensing temperature 35°C (95°F), 220V, 50/60Hz, static cooling

Evap. temp. in °C	-45	-40	-35	-30	-25	-23.3	-20	-15	-10	-6.7	-5	0	5	7.2	10
Capacity in W			24.8	33.4	44.3	48.7	58.5	76.4	97.2	112.0	119.6	141.3			
Power cons. in W			15.0	17.5	20.0	20.8	22.6	25.4	28.1	29.6	30.3	31.9			
Current cons. in A			0.09	0.16	0.18	0.19	0.20	0.22	0.25	0.28	0.30	0.35			
Cons. w/ PFC in A			0.06	0.10	0.12	0.13	0.14	0.15	0.17	0.18	0.19	0.22			
COP in W/W			1.65	1.90	2.22	2.34	2.59	3.01	3.46	3.78	3.94	4.42			

1200 rpm**EN 12900 Household/CECOMAF**, condensing temperature 35°C (95°F), 220V, 50/60Hz, static cooling

Evap. temp. in °C	-45	-40	-35	-30	-25	-23.3	-20	-15	-10	-6.7	-5	0	5	7.2	10
Capacity in W			32.4	42.7	55.4	60.5	71.6	91.8	115.5	132.5	141.4	167.3			
Power cons. in W			19.5	22.3	24.8	25.7	27.6	30.5	33.5	35.2	36.1	38.1			
Current cons. in A			0.13	0.20	0.23	0.24	0.25	0.28	0.31	0.34	0.36	0.41			
Cons. w/ PFC in A			0.09	0.12	0.15	0.16	0.17	0.19	0.21	0.22	0.23	0.26			
COP in W/W			1.66	1.92	2.23	2.35	2.60	3.01	3.45	3.76	3.92	4.39			

1400 rpm**EN 12900 Household/CECOMAF**, condensing temperature 35°C (95°F), 220V, 50/60Hz, static cooling

Evap. temp. in °C	-45	-40	-35	-30	-25	-23.3	-20	-15	-10	-6.7	-5	0	5	7.2	10
Capacity in W			38.7	50.7	65.1	70.9	83.4	106.1	132.8	152.1	162.3	192.3			
Power cons. in W			23.3	26.4	29.2	30.2	32.2	35.5	38.8	40.8	41.8	44.2			
Current cons. in A			0.17	0.24	0.28	0.29	0.31	0.33	0.37	0.40	0.42	0.47			
Cons. w/ PFC in A			0.11	0.15	0.18	0.19	0.21	0.23	0.25	0.26	0.27	0.30			
COP in W/W			1.66	1.92	2.23	2.35	2.59	2.99	3.43	3.73	3.89	4.35			

1600 rpm**EN 12900 Household/CECOMAF**, condensing temperature 35°C (95°F), 220V, 50/60Hz, static cooling

Evap. temp. in °C	-45	-40	-35	-30	-25	-23.3	-20	-15	-10	-6.7	-5	0	5	7.2	10
Capacity in W			44.2	57.8	74.0	80.4	94.4	119.6	149.4	171.0	182.5	216.9			
Power cons. in W			26.8	30.2	33.4	34.5	36.7	40.4	44.1	46.4	47.5	50.4			
Current cons. in A			0.21	0.28	0.33	0.34	0.36	0.39	0.43	0.46	0.48	0.53			
Cons. w/ PFC in A			0.14	0.18	0.21	0.22	0.24	0.26	0.29	0.30	0.31	0.34			
COP in W/W			1.66	1.91	2.22	2.33	2.57	2.96	3.39	3.69	3.84	4.30			

1800 rpm**EN 12900 Household/CECOMAF**, condensing temperature 35°C (95°F), 220V, 50/60Hz, static cooling

Evap. temp. in °C	-45	-40	-35	-30	-25	-23.3	-20	-15	-10	-6.7	-5	0	5	7.2	10
Capacity in W			49.2	64.4	82.4	89.5	105.0	132.8	165.7	189.7	202.6	241.2			
Power cons. in W			30.1	33.9	37.5	38.7	41.3	45.3	49.5	52.1	53.4	56.8			
Current cons. in A			0.24	0.32	0.37	0.38	0.41	0.45	0.49	0.52	0.54	0.60			
Cons. w/ PFC in A			0.16	0.20	0.24	0.25	0.27	0.30	0.32	0.34	0.35	0.38			
COP in W/W			1.64	1.90	2.20	2.31	2.54	2.93	3.35	3.64	3.79	4.25			

2000 rpm**EN 12900 Household/CECOMAF**, condensing temperature 35°C (95°F), 220V, 50/60Hz, static cooling

Evap. temp. in °C	-45	-40	-35	-30	-25	-23.3	-20	-15	-10	-6.7	-5	0	5	7.2	10
Capacity in W			54.2	70.8	90.6	98.4	115.4	145.9	182.0	208.4	222.6	265.5			
Power cons. in W			33.5	37.7	41.7	43.1	45.9	50.4	55.1	58.0	59.5	63.3			
Current cons. in A			0.28	0.36	0.42	0.43	0.46	0.50	0.55	0.59	0.61	0.66			
Cons. w/ PFC in A			0.18	0.23	0.27	0.28	0.30	0.33	0.36	0.38	0.39	0.42			
COP in W/W			1.62	1.88	2.17	2.28	2.51	2.89	3.30	3.59	3.74	4.19			

3000 rpm**EN 12900 Household/CECOMAF**, condensing temperature 35°C (95°F), 220V, 50/60Hz, static cooling

Evap. temp. in °C	-45	-40	-35	-30	-25	-23.3	-20	-15	-10	-6.7	-5	0	5	7.2	10
Capacity in W			82.2	104.8	132.8	144.0	168.5	212.7	265.3	304.1	325.1				
Power cons. in W			54.2	59.5	65.2	67.3	71.7	78.8	86.0	90.6	92.9				
Current cons. in A			0.46	0.56	0.64	0.67	0.72	0.79	0.86	0.90	0.92				
Cons. w/ PFC in A			0.30	0.36	0.42	0.43	0.47	0.51	0.56	0.58	0.92				
COP in W/W			1.52	1.76	2.04	2.14	2.35	2.70	3.09	3.36	3.50				

4000 rpm**EN 12900 Household/CECOMAF**, condensing temperature 35°C (95°F), 220V, 50/60Hz, static cooling

Evap. temp. in °C	-45	-40	-35	-30	-25	-23.3	-20	-15	-10	-6.7	-5	0	5	7.2	10
Capacity in W			106.4	131.1	164.8	178.7	209.6	266.3	334.7						
Power cons. in W			72.2	77.6	84.9	87.8	93.9	104.0	114.3						
Current cons. in A			0.64	0.75	0.86	0.90	0.97	1.07	1.16						
Cons. w/ PFC in A			0.41	0.49	0.56	0.58	0.97	1.07	1.16						
COP in W/W			1.47	1.69	1.94	2.03	2.23	2.56	2.93						

EN 12900 Household/CECOMAF, condensing temperature 45°C (113°F), 220V, 50/60Hz, static cooling															
Evap. temp. in °C	-45	-40	-35	-30	-25	-23.3	-20	-15	-10	-6.7	-5	0	5	7.2	10
Capacity in W			21.5	29.5	38.7	42.4	50.5	65.2	82.6	94.8	101.2	118.9			
Power cons. in W			15.9	19.0	21.7	22.6	24.5	27.5	30.5	32.3	33.1	35.0			
Current cons. in A			0.15	0.21	0.23	0.24	0.25	0.28	0.31	0.34	0.36	0.42			
Cons. w/ PFC in A			0.10	0.13	0.15	0.16	0.17	0.19	0.21	0.22	0.23	0.27			
COP in W/W			1.35	1.55	1.79	1.88	2.06	2.37	2.71	2.94	3.05	3.39			
EN 12900 Household/CECOMAF, condensing temperature 45°C (113°F), 220V, 50/60Hz, static cooling															
Evap. temp. in °C	-45	-40	-35	-30	-25	-23.3	-20	-15	-10	-6.7	-5	0	5	7.2	10
Capacity in W			27.6	37.7	49.0	53.3	62.9	80.0	100.1	114.5	122.0	143.5			
Power cons. in W			20.2	24.0	27.0	28.0	30.1	33.5	36.9	39.0	40.0	42.4			
Current cons. in A			0.19	0.25	0.28	0.29	0.30	0.33	0.37	0.41	0.43	0.49			
Cons. w/ PFC in A			0.12	0.16	0.18	0.19	0.20	0.22	0.25	0.27	0.28	0.31			
COP in W/W			1.37	1.57	1.81	1.90	2.09	2.39	2.72	2.94	3.05	3.38			
EN 12900 Household/CECOMAF, condensing temperature 45°C (113°F), 220V, 50/60Hz, static cooling															
Evap. temp. in °C	-45	-40	-35	-30	-25	-23.3	-20	-15	-10	-6.7	-5	0	5	7.2	10
Capacity in W			32.3	44.5	57.8	62.9	73.9	93.6	116.6	133.1	141.8	167.1			
Power cons. in W			23.5	28.0	31.6	32.9	35.3	39.1	43.1	45.5	46.7	49.7			
Current cons. in A			0.22	0.29	0.33	0.34	0.36	0.39	0.44	0.47	0.49	0.56			
Cons. w/ PFC in A			0.15	0.18	0.21	0.22	0.24	0.26	0.29	0.31	0.32	0.36			
COP in W/W			1.37	1.59	1.83	1.91	2.10	2.39	2.71	2.92	3.04	3.36			
Cons. w/ PFC in A															
EN 12900 Household/CECOMAF, condensing temperature 45°C (113°F), 220V, 50/60Hz, static cooling															
Evap. temp. in °C	-45	-40	-35	-30	-25	-23.3	-20	-15	-10	-6.7	-5	0	5	7.2	10
Capacity in W			36.1	50.3	65.6	71.5	84.1	106.4	132.4	151.2	161.1	190.2			
Power cons. in W			26.4	31.7	35.9	37.4	40.2	44.7	49.2	52.1	53.5	57.1			
Current cons. in A			0.26	0.32	0.37	0.38	0.41	0.45	0.50	0.54	0.56	0.62			
Cons. w/ PFC in A			0.17	0.21	0.24	0.25	0.27	0.30	0.33	0.35	0.36	0.40			
COP in W/W			1.37	1.59	1.83	1.91	2.09	2.38	2.69	2.90	3.01	3.33			
EN 12900 Household/CECOMAF, condensing temperature 45°C (113°F), 220V, 50/60Hz, static cooling															
Evap. temp. in °C	-45	-40	-35	-30	-25	-23.3	-20	-15	-10	-6.7	-5	0	5	7.2	10
Capacity in W			39.5	55.5	72.9	79.6	93.7	118.8	147.9	168.9	180.1	213.0			
Power cons. in W			29.1	35.1	40.1	41.7	45.0	50.2	55.4	58.8	60.4	64.7			
Current cons. in A			0.29	0.36	0.41	0.43	0.46	0.51	0.56	0.60	0.62	0.69			
Cons. w/ PFC in A			0.19	0.23	0.27	0.28	0.30	0.33	0.37	0.39	0.41	0.45			
COP in W/W			1.36	1.58	1.82	1.91	2.08	2.37	2.67	2.87	2.98	3.29			
EN 12900 Household/CECOMAF, condensing temperature 45°C (113°F), 220V, 50/60Hz, static cooling															
Evap. temp. in °C	-45	-40	-35	-30	-25	-23.3	-20	-15	-10	-6.7	-5	0	5	7.2	10
Capacity in W			42.8	60.5	80.0	87.4	103.2	131.0	163.4	186.7	199.1	235.9			
Power cons. in W			31.7	38.6	44.3	46.2	50.0	55.9	61.9	65.7	67.6	72.5			
Current cons. in A			0.33	0.40	0.46	0.48	0.51	0.56	0.62	0.67	0.69	0.76			
Cons. w/ PFC in A			0.21	0.26	0.30	0.31	0.33	0.37	0.41	0.43	0.45	0.49			
COP in W/W			1.35	1.57	1.81	1.89	2.07	2.34	2.64	2.84	2.95	3.25			
EN 12900 Household/CECOMAF, condensing temperature 45°C (113°F), 220V, 50/60Hz, static cooling															
Evap. temp. in °C	-45	-40	-35	-30	-25	-23.3	-20	-15	-10	-6.7	-5	0	5	7.2	10
Capacity in W			63.0	87.7	116.5	127.6	151.5	193.6	242.4	277.6	296.4				
Power cons. in W			48.9	58.5	67.5	70.7	77.0	86.9	96.7	103.1	106.2				
Current cons. in A			0.49	0.58	0.67	0.71	0.77	0.85	0.94	1.00	1.03				
Cons. w/ PFC in A			0.32	0.38	0.44	0.46	0.49	0.55	0.94	1.00	1.03				
COP in W/W			1.29	1.50	1.73	1.81	1.97	2.23	2.51	2.69	2.79				
EN 12900 Household/CECOMAF, condensing temperature 45°C (113°F), 220V, 50/60Hz, static cooling															
Evap. temp. in °C	-45	-40	-35	-30	-25	-23.3	-20	-15	-10	-6.7	-5	0	5	7.2	10
Capacity in W			81.9	109.7	144.9	158.9	189.5	244.2	308.2						
Power cons. in W			64.5	75.2	86.8	91.1	99.6	113.3	127.0						
Current cons. in A			0.65	0.76	0.88	0.93	1.02	1.14	1.26						
Cons. w/ PFC in A			0.42	0.49	0.57	0.92	1.01	1.13	1.25						
COP in W/W			1.27	1.46	1.67	1.75	1.90	2.16	2.43						

1000 rpm**EN 12900 Household/CECOMAF**, condensing temperature 55°C (131°F), 220V, 50/60Hz, static cooling

Evap. temp. in °C	-45	-40	-35	-30	-25	-23.3	-20	-15	-10	-6.7	-5	0	5	7.2	10
Capacity in W			16.1	24.0	32.3	35.6	42.6	55.6	70.8	81.6	87.2	102.5			
Power cons. in W			15.3	19.6	22.8	23.9	26.1	29.7	33.4	35.6	36.7	39.2			
Current cons. in A			0.16	0.21	0.23	0.24	0.25	0.28	0.33	0.36	0.39	0.46			
Cons. w/ PFC in A			0.10	0.13	0.15	0.16	0.17	0.19	0.22	0.24	0.25	0.29			
COP in W/W			1.06	1.23	1.42	1.49	1.64	1.87	2.12	2.29	2.37	2.61			

1200 rpm**EN 12900 Household/CECOMAF**, condensing temperature 55°C (131°F), 220V, 50/60Hz, static cooling

Evap. temp. in °C	-45	-40	-35	-30	-25	-23.3	-20	-15	-10	-6.7	-5	0	5	7.2	10
Capacity in W			21.0	31.0	41.3	45.2	53.6	68.7	86.4	99.0	105.6	124.2			
Power cons. in W			19.7	24.8	28.5	29.7	32.2	36.2	40.4	43.1	44.4	47.6			
Current cons. in A			0.19	0.24	0.28	0.29	0.31	0.34	0.39	0.44	0.46	0.54			
Cons. w/ PFC in A			0.12	0.15	0.18	0.19	0.20	0.23	0.26	0.28	0.30	0.34			
COP in W/W			1.07	1.25	1.45	1.52	1.66	1.90	2.14	2.30	2.38	2.61			

1400 rpm**EN 12900 Household/CECOMAF**, condensing temperature 55°C (131°F), 220V, 50/60Hz, static cooling

Evap. temp. in °C	-45	-40	-35	-30	-25	-23.3	-20	-15	-10	-6.7	-5	0	5	7.2	10
Capacity in W			24.7	36.5	48.7	53.3	63.1	80.5	100.9	115.4	123.1	144.9			
Power cons. in W			23.0	28.9	33.3	34.7	37.6	42.3	47.2	50.3	51.9	55.8			
Current cons. in A			0.22	0.28	0.32	0.33	0.36	0.40	0.46	0.51	0.53	0.61			
Cons. w/ PFC in A			0.14	0.18	0.21	0.22	0.24	0.27	0.30	0.33	0.34	0.39			
COP in W/W			1.07	1.26	1.46	1.53	1.68	1.90	2.14	2.29	2.37	2.60			

1600 rpm**EN 12900 Household/CECOMAF**, condensing temperature 55°C (131°F), 220V, 50/60Hz, static cooling

Evap. temp. in °C	-45	-40	-35	-30	-25	-23.3	-20	-15	-10	-6.7	-5	0	5	7.2	10
Capacity in W			27.6	41.2	55.2	60.5	71.7	91.6	114.7	131.2	139.9	165.0			
Power cons. in W			25.7	32.5	37.6	39.3	42.7	48.2	53.9	57.6	59.4	64.2			
Current cons. in A			0.25	0.31	0.36	0.38	0.41	0.47	0.53	0.58	0.61	0.69			
Cons. w/ PFC in A			0.16	0.20	0.24	0.25	0.27	0.31	0.35	0.38	0.39	0.45			
COP in W/W			1.07	1.27	1.47	1.54	1.68	1.90	2.13	2.28	2.36	2.57			

1800 rpm**EN 12900 Household/CECOMAF**, condensing temperature 55°C (131°F), 220V, 50/60Hz, static cooling

Evap. temp. in °C	-45	-40	-35	-30	-25	-23.3	-20	-15	-10	-6.7	-5	0	5	7.2	10
Capacity in W			30.1	45.2	61.1	67.1	79.8	102.2	128.2	146.8	156.6	185.0			
Power cons. in W			28.1	35.8	41.7	43.7	47.7	54.1	60.7	65.0	67.1	72.7			
Current cons. in A			0.28	0.35	0.41	0.43	0.46	0.53	0.60	0.65	0.68	0.77			
Cons. w/ PFC in A			0.18	0.23	0.27	0.28	0.31	0.35	0.39	0.42	0.44	0.50			
COP in W/W			1.07	1.27	1.47	1.53	1.67	1.89	2.11	2.26	2.33	2.54			

2000 rpm**EN 12900 Household/CECOMAF**, condensing temperature 55°C (131°F), 220V, 50/60Hz, static cooling

Evap. temp. in °C	-45	-40	-35	-30	-25	-23.3	-20	-15	-10	-6.7	-5	0	5	7.2	10
Capacity in W			32.5	49.1	66.8	73.5	87.6	112.6	141.6	162.2	173.2	205.0			
Power cons. in W			30.6	39.0	45.9	48.2	52.8	60.1	67.7	72.6	75.1	81.6			
Current cons. in A			0.32	0.38	0.45	0.47	0.52	0.59	0.67	0.72	0.75	0.85			
Cons. w/ PFC in A			0.21	0.25	0.29	0.31	0.34	0.38	0.43	0.47	0.49	0.55			
COP in W/W			1.06	1.26	1.46	1.53	1.66	1.87	2.09	2.23	2.31	2.51			

3000 rpm**EN 12900 Household/CECOMAF**, condensing temperature 55°C (131°F), 220V, 50/60Hz, static cooling

Evap. temp. in °C	-45	-40	-35	-30	-25	-23.3	-20	-15	-10	-6.7	-5	0	5	7.2	10
Capacity in W			49.4	71.3	97.1	107.1	128.6	166.7	210.7	242.0	258.6				
Power cons. in W			47.4	58.8	69.7	73.6	81.3	93.6	106.1	114.2	118.2				
Current cons. in A			0.48	0.56	0.67	0.70	0.78	0.90	1.01	1.09	1.13				
Cons. w/ PFC in A			0.31	0.37	0.44	0.46	0.51	0.89	1.01	1.09	1.13				
COP in W/W			1.04	1.21	1.39	1.46	1.58	1.78	1.99	2.12	2.19				

4000 rpm**EN 12900 Household/CECOMAF**, condensing temperature 55°C (131°F), 220V, 50/60Hz, static cooling

Evap. temp. in °C	-45	-40	-35	-30	-25	-23.3	-20	-15	-10	-6.7	-5	0	5	7.2	10
Capacity in W			65.1	90.4	121.9	134.5	161.9	210.8	267.8						
Power cons. in W			63.6	77.1	91.0	96.0	106.1	122.1	138.5						
Current cons. in A			0.63	0.74	0.88	0.93	1.04	1.20	1.36						
Cons. w/ PFC in A			0.41	0.49	0.89	0.94	1.03	1.19	1.35						
COP in W/W			1.02	1.17	1.34	1.40	1.53	1.73	1.93						

1000 rpm**ASHRAE LBP**, condensing temperature 35°C (95°F), 220V, 50/60Hz, static cooling

Evap. temp. in °C	-45	-40	-35	-30	-25	-23.3	-20	-15	-10	-6.7	-5	0	5	7.2	10
Capacity in W			25.3	34.1	45.3	49.8	59.8	78.1	99.4	114.4	122.3	144.4			
Power cons. in W			15.0	17.5	20.0	20.8	22.6	25.4	28.1	29.6	30.3	31.9			
Current cons. in A			0.09	0.16	0.18	0.19	0.20	0.22	0.25	0.28	0.30	0.35			
Cons. w/ PFC in A			0.06	0.10	0.12	0.13	0.14	0.15	0.17	0.18	0.19	0.22			
COP in W/W			1.69	1.95	2.27	2.39	2.65	3.08	3.54	3.86	4.03	4.52			

1200 rpm**ASHRAE LBP**, condensing temperature 35°C (95°F), 220V, 50/60Hz, static cooling

Evap. temp. in °C	-45	-40	-35	-30	-25	-23.3	-20	-15	-10	-6.7	-5	0	5	7.2	10
Capacity in W			33.1	43.7	56.6	61.8	73.2	93.8	118.1	135.4	144.6	171.0			
Power cons. in W			19.5	22.2	24.8	25.7	27.6	30.5	33.4	35.2	36.0	38.0			
Current cons. in A			0.13	0.20	0.23	0.24	0.25	0.28	0.31	0.34	0.36	0.41			
Cons. w/ PFC in A			0.09	0.12	0.15	0.16	0.17	0.19	0.21	0.22	0.23	0.26			
COP in W/W			1.70	1.96	2.28	2.40	2.65	3.07	3.53	3.85	4.01	4.50			

1400 rpm**ASHRAE LBP**, condensing temperature 35°C (95°F), 220V, 50/60Hz, static cooling

Evap. temp. in °C	-45	-40	-35	-30	-25	-23.3	-20	-15	-10	-6.7	-5	0	5	7.2	10
Capacity in W			39.6	51.8	66.6	72.4	85.3	108.4	135.7	155.4	165.9	196.6			
Power cons. in W			23.3	26.4	29.2	30.2	32.2	35.5	38.7	40.8	41.7	44.1			
Current cons. in A			0.17	0.24	0.28	0.29	0.31	0.33	0.37	0.40	0.42	0.47			
Cons. w/ PFC in A			0.11	0.15	0.18	0.19	0.21	0.23	0.25	0.26	0.27	0.30			
COP in W/W			1.70	1.97	2.28	2.40	2.65	3.06	3.50	3.81	3.98	4.45			

1600 rpm**ASHRAE LBP**, condensing temperature 35°C (95°F), 220V, 50/60Hz, static cooling

Evap. temp. in °C	-45	-40	-35	-30	-25	-23.3	-20	-15	-10	-6.7	-5	0	5	7.2	10
Capacity in W			45.2	59.1	75.6	82.2	96.5	122.3	152.7	174.8	186.6	221.7			
Power cons. in W			26.7	30.2	33.3	34.4	36.7	40.3	44.0	46.3	47.5	50.3			
Current cons. in A			0.21	0.28	0.33	0.34	0.36	0.39	0.43	0.46	0.48	0.53			
Cons. w/ PFC in A			0.14	0.18	0.21	0.22	0.24	0.26	0.29	0.30	0.31	0.34			
COP in W/W			1.69	1.96	2.27	2.39	2.63	3.03	3.47	3.77	3.93	4.40			

1800 rpm**ASHRAE LBP**, condensing temperature 35°C (95°F), 220V, 50/60Hz, static cooling

Evap. temp. in °C	-45	-40	-35	-30	-25	-23.3	-20	-15	-10	-6.7	-5	0	5	7.2	10
Capacity in W			50.3	65.8	84.2	91.5	107.3	135.7	169.4	193.9	207.1	246.5			
Power cons. in W			30.1	33.9	37.4	38.7	41.2	45.3	49.4	52.1	53.3	56.7			
Current cons. in A			0.24	0.32	0.37	0.38	0.41	0.45	0.49	0.52	0.54	0.60			
Cons. w/ PFC in A			0.16	0.20	0.24	0.25	0.27	0.30	0.32	0.34	0.35	0.38			
COP in W/W			1.67	1.94	2.25	2.36	2.60	3.00	3.43	3.72	3.88	4.35			

2000 rpm**ASHRAE LBP**, condensing temperature 35°C (95°F), 220V, 50/60Hz, static cooling

Evap. temp. in °C	-45	-40	-35	-30	-25	-23.3	-20	-15	-10	-6.7	-5	0	5	7.2	10
Capacity in W			55.4	72.3	92.6	100.6	117.9	149.1	186.0	213.0	227.5	271.4			
Power cons. in W			33.5	37.7	41.6	43.0	45.9	50.4	55.0	58.0	59.4	63.3			
Current cons. in A			0.28	0.36	0.42	0.43	0.46	0.50	0.55	0.59	0.60	0.66			
Cons. w/ PFC in A			0.18	0.23	0.27	0.28	0.30	0.33	0.36	0.38	0.39	0.42			
COP in W/W			1.65	1.92	2.22	2.34	2.57	2.96	3.38	3.67	3.83	4.29			

3000 rpm**ASHRAE LBP**, condensing temperature 35°C (95°F), 220V, 50/60Hz, static cooling

Evap. temp. in °C	-45	-40	-35	-30	-25	-23.3	-20	-15	-10	-6.7	-5	0	5	7.2	10
Capacity in W			84.0	107.1	135.8	147.2	172.2	217.4	271.2	310.8	332.3				
Power cons. in W			54.2	59.4	65.1	67.3	71.6	78.7	85.9	90.6	92.8				
Current cons. in A			0.46	0.56	0.64	0.67	0.72	0.79	0.86	0.90	0.92				
Cons. w/ PFC in A			0.30	0.36	0.42	0.43	0.47	0.51	0.56	0.58	0.92				
COP in W/W			1.55	1.80	2.08	2.19	2.40	2.76	3.16	3.43	3.58				

4000 rpm**ASHRAE LBP**, condensing temperature 35°C (95°F), 220V, 50/60Hz, static cooling

Evap. temp. in °C	-45	-40	-35	-30	-25	-23.3	-20	-15	-10	-6.7	-5	0	5	7.2	10
Capacity in W			108.8	134.0	168.4	182.6	214.2	272.2	342.1						
Power cons. in W			72.2	77.5	84.8	87.8	93.9	103.9	114.2						
Current cons. in A			0.64	0.75	0.86	0.90	0.97	1.07	1.15						
Cons. w/ PFC in A			0.41	0.49	0.56	0.58	0.97	1.07	1.16						
COP in W/W			1.51	1.73	1.98	2.08	2.28	2.62	2.99						

1000 rpm**ASHRAE LBP**, condensing temperature 45°C (113°F), 220V, 50/60Hz, static cooling

Evap. temp. in °C	-45	-40	-35	-30	-25	-23.3	-20	-15	-10	-6.7	-5	0	5	7.2	10
Capacity in W			23.8	32.7	42.9	47.0	56.0	72.4	91.6	105.2	112.3	132.0			
Power cons. in W			15.9	19.0	21.6	22.6	24.4	27.5	30.5	32.3	33.1	35.0			
Current cons. in A			0.15	0.21	0.23	0.24	0.25	0.28	0.31	0.34	0.36	0.42			
Cons. w/ PFC in A			0.10	0.13	0.15	0.16	0.17	0.19	0.21	0.22	0.23	0.27			
COP in W/W			1.50	1.72	1.98	2.08	2.29	2.64	3.01	3.26	3.39	3.77			

1200 rpm**ASHRAE LBP**, condensing temperature 45°C (113°F), 220V, 50/60Hz, static cooling

Evap. temp. in °C	-45	-40	-35	-30	-25	-23.3	-20	-15	-10	-6.7	-5	0	5	7.2	10
Capacity in W			30.6	41.8	54.3	59.2	69.7	88.8	111.1	127.1	135.4	159.3			
Power cons. in W			20.1	23.9	27.0	28.0	30.1	33.5	36.9	39.0	40.0	42.4			
Current cons. in A			0.19	0.25	0.28	0.29	0.30	0.33	0.37	0.41	0.43	0.49			
Cons. w/ PFC in A			0.12	0.16	0.18	0.19	0.20	0.22	0.25	0.27	0.28	0.31			
COP in W/W			1.52	1.75	2.01	2.11	2.32	2.65	3.02	3.26	3.39	3.76			

1400 rpm**ASHRAE LBP**, condensing temperature 45°C (113°F), 220V, 50/60Hz, static cooling

Evap. temp. in °C	-45	-40	-35	-30	-25	-23.3	-20	-15	-10	-6.7	-5	0	5	7.2	10
Capacity in W			35.8	49.3	64.1	69.8	82.0	103.9	129.4	147.8	157.4	185.5			
Power cons. in W			23.5	28.0	31.6	32.8	35.3	39.1	43.0	45.5	46.7	49.7			
Current cons. in A			0.22	0.29	0.32	0.34	0.36	0.39	0.44	0.47	0.49	0.55			
Cons. w/ PFC in A			0.15	0.18	0.21	0.22	0.24	0.26	0.29	0.31	0.32	0.36			
COP in W/W			1.52	1.76	2.03	2.12	2.33	2.66	3.01	3.25	3.37	3.73			

1600 rpm**ASHRAE LBP**, condensing temperature 45°C (113°F), 220V, 50/60Hz, static cooling

Evap. temp. in °C	-45	-40	-35	-30	-25	-23.3	-20	-15	-10	-6.7	-5	0	5	7.2	10
Capacity in W			40.0	55.7	72.8	79.3	93.3	118.0	147.0	167.8	178.8	211.1			
Power cons. in W			26.4	31.7	35.9	37.3	40.2	44.6	49.2	52.0	53.4	57.1			
Current cons. in A			0.26	0.32	0.37	0.38	0.41	0.45	0.50	0.54	0.56	0.62			
Cons. w/ PFC in A			0.17	0.21	0.24	0.25	0.27	0.30	0.33	0.35	0.36	0.40			
COP in W/W			1.52	1.76	2.03	2.12	2.32	2.65	2.99	3.22	3.35	3.70			

1800 rpm**ASHRAE LBP**, condensing temperature 45°C (113°F), 220V, 50/60Hz, static cooling

Evap. temp. in °C	-45	-40	-35	-30	-25	-23.3	-20	-15	-10	-6.7	-5	0	5	7.2	10
Capacity in W			43.8	61.6	80.9	88.3	104.0	131.8	164.2	187.5	199.9	236.5			
Power cons. in W			29.0	35.1	40.1	41.7	45.0	50.2	55.4	58.7	60.4	64.7			
Current cons. in A			0.29	0.36	0.41	0.43	0.46	0.51	0.56	0.60	0.62	0.69			
Cons. w/ PFC in A			0.19	0.23	0.27	0.28	0.30	0.33	0.37	0.39	0.41	0.45			
COP in W/W			1.51	1.75	2.02	2.12	2.31	2.63	2.96	3.19	3.31	3.66			

2000 rpm**ASHRAE LBP**, condensing temperature 45°C (113°F), 220V, 50/60Hz, static cooling

Evap. temp. in °C	-45	-40	-35	-30	-25	-23.3	-20	-15	-10	-6.7	-5	0	5	7.2	10
Capacity in W			47.4	67.1	88.7	96.9	114.4	145.3	181.3	207.2	221.0	261.9			
Power cons. in W			31.7	38.5	44.2	46.1	49.9	55.8	61.8	65.6	67.5	72.5			
Current cons. in A			0.33	0.40	0.46	0.48	0.51	0.56	0.62	0.67	0.69	0.76			
Cons. w/ PFC in A			0.21	0.26	0.30	0.31	0.33	0.37	0.41	0.43	0.45	0.49			
COP in W/W			1.50	1.74	2.01	2.10	2.29	2.60	2.93	3.16	3.27	3.61			

3000 rpm**ASHRAE LBP**, condensing temperature 45°C (113°F), 220V, 50/60Hz, static cooling

Evap. temp. in °C	-45	-40	-35	-30	-25	-23.3	-20	-15	-10	-6.7	-5	0	5	7.2	10
Capacity in W			69.9	97.3	129.2	141.6	168.1	214.8	269.0	308.1	329.0				
Power cons. in W			48.9	58.4	67.5	70.6	76.9	86.8	96.7	103.0	106.1				
Current cons. in A			0.49	0.58	0.67	0.70	0.76	0.85	0.94	1.00	1.03				
Cons. w/ PFC in A			0.32	0.38	0.44	0.46	0.49	0.55	0.94	1.00	1.03				
COP in W/W			1.43	1.67	1.91	2.00	2.18	2.47	2.78	2.99	3.10				

4000 rpm**ASHRAE LBP**, condensing temperature 45°C (113°F), 220V, 50/60Hz, static cooling

Evap. temp. in °C	-45	-40	-35	-30	-25	-23.3	-20	-15	-10	-6.7	-5	0	5	7.2	10
Capacity in W			90.8	121.6	160.7	176.3	210.2	270.9	342.0						
Power cons. in W			64.5	75.2	86.8	91.0	99.6	113.2	126.9						
Current cons. in A			0.65	0.76	0.88	0.93	1.01	1.14	1.25						
Cons. w/ PFC in A			0.42	0.49	0.57	0.92	1.01	1.13	1.25						
COP in W/W			1.41	1.62	1.85	1.94	2.11	2.39	2.69						

1000 rpm ASHRAE LBP, condensing temperature 55°C (131°F), 220V, 50/60Hz, static cooling

Evap. temp. in °C	-45	-40	-35	-30	-25	-23.3	-20	-15	-10	-6.7	-5	0	5	7.2	10
Capacity in W			19.6	29.2	39.3	43.2	51.8	67.6	86.1	99.3	106.1	124.8			
Power cons. in W			15.3	19.6	22.8	23.8	26.0	29.6	33.3	35.6	36.7	39.2			
Current cons. in A			0.16	0.21	0.23	0.24	0.25	0.28	0.33	0.36	0.39	0.46			
Cons. w/ PFC in A			0.10	0.13	0.15	0.16	0.17	0.19	0.22	0.24	0.25	0.29			
COP in W/W			1.28	1.49	1.72	1.81	1.99	2.28	2.58	2.79	2.89	3.18			

1200 rpm ASHRAE LBP, condensing temperature 55°C (131°F), 220V, 50/60Hz, static cooling

Evap. temp. in °C	-45	-40	-35	-30	-25	-23.3	-20	-15	-10	-6.7	-5	0	5	7.2	10
Capacity in W			25.6	37.7	50.1	54.9	65.1	83.5	105.1	120.5	128.6	151.2			
Power cons. in W			19.7	24.8	28.5	29.7	32.2	36.2	40.4	43.1	44.3	47.5			
Current cons. in A			0.19	0.24	0.28	0.29	0.31	0.34	0.39	0.44	0.46	0.54			
Cons. w/ PFC in A			0.12	0.15	0.18	0.19	0.20	0.23	0.26	0.28	0.30	0.34			
COP in W/W			1.30	1.52	1.76	1.85	2.02	2.31	2.60	2.80	2.90	3.18			

1400 rpm ASHRAE LBP, condensing temperature 55°C (131°F), 220V, 50/60Hz, static cooling

Evap. temp. in °C	-45	-40	-35	-30	-25	-23.3	-20	-15	-10	-6.7	-5	0	5	7.2	10
Capacity in W			30.0	44.4	59.2	64.8	76.7	97.9	122.8	140.5	149.8	176.4			
Power cons. in W			23.0	28.9	33.3	34.7	37.6	42.3	47.2	50.3	51.8	55.8			
Current cons. in A			0.22	0.28	0.32	0.33	0.36	0.40	0.46	0.51	0.53	0.61			
Cons. w/ PFC in A			0.14	0.18	0.21	0.22	0.24	0.27	0.30	0.33	0.34	0.39			
COP in W/W			1.30	1.54	1.78	1.87	2.04	2.32	2.60	2.79	2.89	3.16			

1600 rpm ASHRAE LBP, condensing temperature 55°C (131°F), 220V, 50/60Hz, static cooling

Evap. temp. in °C	-45	-40	-35	-30	-25	-23.3	-20	-15	-10	-6.7	-5	0	5	7.2	10
Capacity in W			33.5	50.0	67.1	73.5	87.2	111.4	139.5	159.7	170.3	201.0			
Power cons. in W			25.7	32.4	37.6	39.3	42.7	48.1	53.8	57.5	59.3	64.1			
Current cons. in A			0.25	0.31	0.36	0.38	0.41	0.47	0.53	0.58	0.61	0.69			
Cons. w/ PFC in A			0.16	0.20	0.24	0.25	0.27	0.31	0.35	0.38	0.39	0.45			
COP in W/W			1.30	1.54	1.79	1.87	2.04	2.31	2.59	2.78	2.87	3.14			

1800 rpm ASHRAE LBP, condensing temperature 55°C (131°F), 220V, 50/60Hz, static cooling

Evap. temp. in °C	-45	-40	-35	-30	-25	-23.3	-20	-15	-10	-6.7	-5	0	5	7.2	10
Capacity in W			36.5	55.0	74.3	81.5	97.0	124.2	155.9	178.6	190.5	225.3			
Power cons. in W			28.1	35.7	41.7	43.7	47.7	54.0	60.6	64.9	67.0	72.7			
Current cons. in A			0.28	0.35	0.41	0.43	0.46	0.53	0.60	0.65	0.68	0.77			
Cons. w/ PFC in A			0.18	0.23	0.27	0.28	0.31	0.35	0.39	0.42	0.44	0.50			
COP in W/W			1.30	1.54	1.78	1.87	2.04	2.30	2.57	2.75	2.84	3.10			

2000 rpm ASHRAE LBP, condensing temperature 55°C (131°F), 220V, 50/60Hz, static cooling

Evap. temp. in °C	-45	-40	-35	-30	-25	-23.3	-20	-15	-10	-6.7	-5	0	5	7.2	10
Capacity in W			39.5	59.7	81.2	89.3	106.5	136.9	172.2	197.4	210.8	249.6			
Power cons. in W			30.6	39.0	45.8	48.1	52.7	60.1	67.7	72.6	75.0	81.5			
Current cons. in A			0.32	0.38	0.45	0.47	0.52	0.59	0.67	0.72	0.75	0.85			
Cons. w/ PFC in A			0.21	0.25	0.29	0.31	0.34	0.38	0.43	0.47	0.49	0.55			
COP in W/W			1.29	1.53	1.77	1.86	2.02	2.28	2.55	2.72	2.81	3.06			

3000 rpm ASHRAE LBP, condensing temperature 55°C (131°F), 220V, 50/60Hz, static cooling

Evap. temp. in °C	-45	-40	-35	-30	-25	-23.3	-20	-15	-10	-6.7	-5	0	5	7.2	10
Capacity in W			59.9	86.7	118.0	130.1	156.3	202.7	256.3	294.6	314.8				
Power cons. in W			47.4	58.8	69.7	73.5	81.2	93.5	106.0	114.1	118.1				
Current cons. in A			0.31	0.37	0.44	0.46	0.51	0.89	1.01	1.09	1.13				
Cons. w/ PFC in A			0.48	0.56	0.66	0.70	0.78	0.89	1.01	1.09	1.13				
COP in W/W			1.26	1.47	1.69	1.77	1.92	2.17	2.42	2.58	2.67				

4000 rpm ASHRAE LBP, condensing temperature 55°C (131°F), 220V, 50/60Hz, static cooling

Evap. temp. in °C	-45	-40	-35	-30	-25	-23.3	-20	-15	-10	-6.7	-5	0	5	7.2	10
Capacity in W			79.1	109.8	148.1	163.4	196.8	256.4	325.8						
Power cons. in W			63.5	77.1	91.0	96.0	106.0	122.0	138.4						
Current cons. in A			0.63	0.74	0.88	0.93	1.04	1.20	1.36						
Cons. w/ PFC in A			0.41	0.49	0.89	0.94	1.03	1.19	1.35						
COP in W/W			1.24	1.42	1.63	1.70	1.86	2.10	2.35						

CECOMAF LBP

220V, 50/60Hz, static cooling

Evaporating temperature -25°C (-13°F)

Condensing temperature 55°C (131°F)

Speed in rpm	1000	1200	1400	1600	1800	2000	3000	4000
Capacity in W	32.3	41.3	48.7	55.2	61.1	66.8	97.1	121.9
Power cons. in W	22.8	28.5	33.3	37.6	41.7	45.9	69.7	91.0
Current cons. in A	0.23	0.28	0.32	0.36	0.41	0.45	0.67	0.88
Cons. w/ PFC in A	0.15	0.18	0.21	0.24	0.27	0.29	0.44	0.89
COP in W/W	1.42	1.45	1.46	1.47	1.47	1.46	1.39	1.34

ASHRAE LBP

220V, 50/60Hz, static cooling

Evaporating temperature -23.3°C (-10°F)

Condensing temperature 54.4°C (130°F)

Speed in rpm	1000	1200	1400	1600	1800	2000	3000	4000
Capacity in W	43.3	55.1	65.0	73.8	81.9	89.7	130.8	164.1
Power cons. in W	23.8	29.6	34.6	39.2	43.6	48.1	73.4	95.6
Current cons. in A	0.24	0.29	0.33	0.38	0.43	0.47	0.70	0.93
Cons. w/ PFC in A	0.16	0.19	0.22	0.25	0.28	0.31	0.46	0.93
COP in W/W	1.82	1.86	1.88	1.88	1.88	1.87	1.78	1.72

Optimization point

220V, 50/60Hz, static cooling

Evaporating temperature -25°C (-13°F)

Condensing temperature 35°C (95°F)

Speed in rpm	1000	1200	1400	1600	1800	2000	3000	4000
Capacity in W	44.3	55.4	65.1	74.0	82.4	90.6	132.8	164.8
Power cons. in W	20.0	24.8	29.2	33.4	37.5	41.7	65.2	84.9
Current cons. in A	0.18	0.23	0.28	0.33	0.37	0.42	0.64	0.86
Cons. w/ PFC in A	0.12	0.15	0.18	0.21	0.24	0.27	0.42	0.56
COP in W/W	2.22	2.23	2.23	2.22	2.20	2.17	2.04	1.94

Optimization point

220V, 50/60Hz, static cooling

Evaporating temperature -10°C (14°F)

Condensing temperature 45°C (113°F)

Speed in rpm	1000	1200	1400	1600	1800	2000	3000	4000
Capacity in W	82.6	100.1	116.6	132.4	147.9	163.4	242.4	308.2
Power cons. in W	30.5	36.9	43.1	49.2	55.4	61.9	96.7	127.0
Current cons. in A	0.31	0.37	0.44	0.50	0.56	0.62	0.94	1.26
Cons. w/ PFC in A	0.21	0.25	0.29	0.33	0.37	0.41	0.94	1.25
COP in W/W	2.71	2.72	2.71	2.69	2.67	2.64	2.51	2.43

Grey background

Compressor designation (yellow box)

SECOP

Voltage | Application

XV...KX

Code number

220 - 240 V / 50/60 Hz

(controller reference)

LBP LST/HST C

only with electronic controller

108H XXX

Refrigerant

R600a

(yellow warning sign is placed separately)

**Approvals**

Data Matrix Code | QR Code

(code number | website link)
on white background

8762

Country of origin or manufacturer**Test conditions****EN 12900/
CECOMAF****ASHRAE
LBP**

Condensing temperature

see tables

Ambient temperature

32°C

Suction gas temperature

32°C

Liquid temperature

no subcooling

Mounting accessories for XV8.0KX**Code number**

Bolt joint for one compressor Ø: 16 mm 118-1917

Bolt joint in quantities Ø: 16 mm 118-1918

Snap-on in quantities Ø: 16 mm 118-1919

Accessories for electronic unit 105N5052**Code number**

Connector cable assembly 400 mm 105B7102

Connector cable assembly 500 mm 105B7103

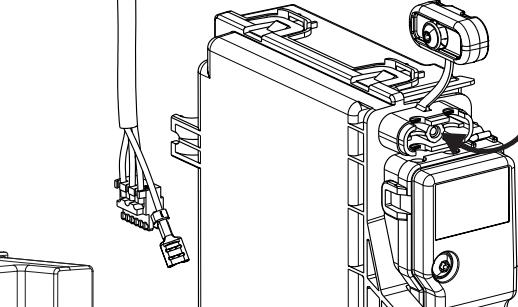
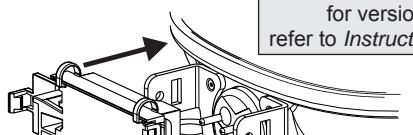
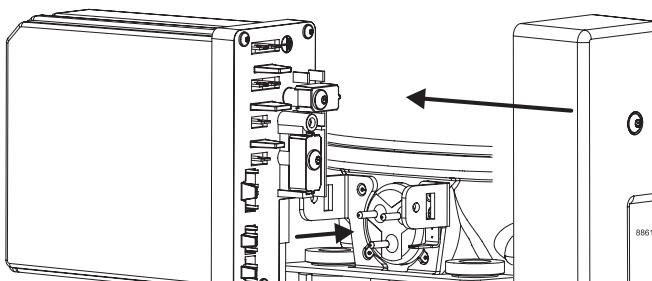
Connector cable assembly 540 mm 105B7104

Attached controller (PFC):

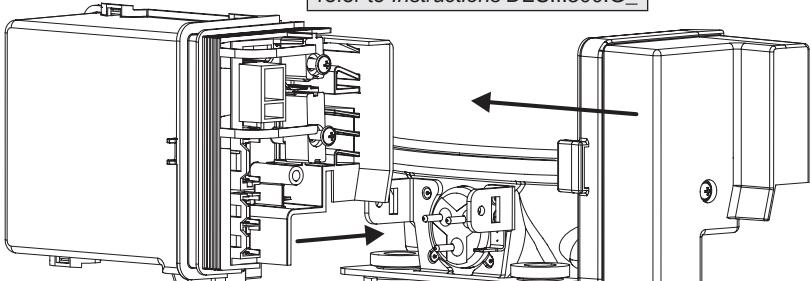
for version 105N5320

refer to *Instructions DES.I.300.V***Detached controller:**

for version 105N5052

refer to *Instructions DES.I.300.H***Attached controller:**

for version 105N5022

refer to *Instructions DES.I.300.G*

Nidec GA Compressors accepts no responsibility for possible errors in catalogs, brochures, and other printed material. Nidec GA Compressors reserves the right to alter its products without notice. This also applies to products already on order provided that such alterations can be made without subsequent changes being necessary to specifications already agreed. All trademarks in this material are the property of the respective companies. Secop and the Secop logotype are trademarks of Nidec Global Appliance Germany GmbH. All rights reserved. www.secop.com