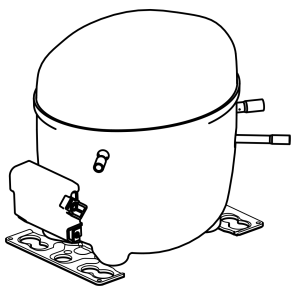


FMFT413U



ENGINEERING CODE
513805010



REFRIGERANT
R-290



POWER SUPPLY
115-127 V 50-60
Hz/200-240 V 50-
60 Hz



APPLICATION
LBP



STANDARD
ASHRAE



MOTOR TYPE
BPM



COOLING CAPACITY
(4500 RPM)
1003 W



EFFICIENCY
(4500 RPM)
1.75 W/W

DATA

GENERAL DATA

Model	FMFT413U
Type	Hermetic Reciprocating
Technology	VCC
Compressor Application	LBP
Expansion Device	Capillary Tube
Compressor Cooling	Fan/220
HP	1/2
Starting Torque	LST
Plant	BRAZIL

ELECTRICAL DATA

Start Winding Resistance	4.3 Ω at 25°C
Run Winding Resistance	4.3 Ω at 25°C

MECHANICAL DATA

Displacement	12.92 cm³
Oil Charge	430 ml
Oil Type	ESTER
Oil Viscosity	ISO22
Weight	10.9 Kg

ELECTRICAL COMPONENTS

CSR CSIR BOX	No
Starting Device Type	INVERTER
Starting Device Description	CF10B01 N 0.1 X
Overload Protection	CF10B01 N 0.1 XX A Y
Inverter	CF10B01 N 0.1 X
Inverter Description	CF10B01 N 0.1 X DUAL VOLT

PERFORMANCE

TESTED CONDITIONS

Tested Refrigerant	R-290
Tested Application	LBP
Tested Standard	ASHRAE
Tested Cooling	Fan
Tested Voltage	220 V
Refrigerant Temperature	Dew

Performance on Compressor Speed: 1800 RPM

RATED POINTS

Condensing Temperature °C	Evaporating Temperature °C	Cooling Capacity W	Efficiency W/W	Power Consumption W	Current A	Gas Flow Rate kg/h
54.4	-23.3	404	1.78	227	1.86	4.1
Test Condition: Liquid 32.2 °C, Return Gas 32.2 °C. Data generated in accordance to EN 12900:2013 polynomial equation and tolerance guidelines.						

PERFORMANCE CURVE

Condensing Temperature 35°C

Evaporating Temperature °C	Cooling Capacity W	Efficiency W/W	Power Consumption W	Current A	Gas Flow Rate kg/h
-40	191	1.63	117	1.06	1.92
-35	250	1.80	139	1.24	2.52
-30	319	1.99	160	1.40	3.23
-25	402	2.24	180	1.55	4.08
-20	501	2.53	198	1.68	5.10
-15	618	2.89	214	1.79	6.32
-10	758	3.32	228	1.89	7.78
-5	922	3.84	240	1.96	9.52
0	1113	4.46	250	2.02	11.55
Test Condition: Liquid 32.2 °C, Return Gas 32.2 °C. Data generated in accordance to EN 12900:2013 polynomial equation and tolerance guidelines.					

PERFORMANCE CURVE

Condensing Temperature 45°C

Evaporating Temperature °C	Cooling Capacity W	Efficiency W/W	Power Consumption W	Current A	Gas Flow Rate kg/h
-40	176	1.45	121	1.14	1.77
-35	235	1.59	147	1.32	2.37
-30	305	1.76	174	1.50	3.08
-25	388	1.95	199	1.68	3.93
-20	487	2.17	224	1.85	4.95
-15	605	2.43	249	2.02	6.18
-10	744	2.74	272	2.18	7.64
-5	908	3.09	294	2.33	9.37
0	1100	3.50	315	2.47	11.41
Test Condition: Liquid 32.2 °C, Return Gas 32.2 °C. Data generated in accordance to EN 12900:2013 polynomial equation and tolerance guidelines.					

PERFORMANCE CURVE				Condensing Temperature 55°C	
Evaporating Temperature °C	Cooling Capacity W	Efficiency W/W	Power Consumption W	Current A	Gas Flow Rate kg/h
-30	288	1.55	186	1.57	2.91
-25	371	1.70	218	1.79	3.76
-20	470	1.88	250	2.02	4.78
-15	588	2.09	282	2.25	6.01
-10	728	2.32	314	2.48	7.48
-5	893	2.58	346	2.72	9.21
0	1084	2.87	378	2.96	11.25
Test Condition: Liquid 32.2 °C, Return Gas 32.2 °C. Data generated in accordance to EN 12900:2013 polynomial equation and tolerance guidelines.					

Performance on Compressor Speed: 3000 RPM

RATED POINTS

Condensing Temperature °C	Evaporating Temperature °C	Cooling Capacity W	Efficiency W/W	Power Consumption W	Current A	Gas Flow Rate kg/h
54.4	-23.3	682	1.83	373	2.87	6.92
Test Condition: Liquid 32.2 °C, Return Gas 32.2 °C. Data generated in accordance to EN 12900:2013 polynomial equation and tolerance guidelines.						

PERFORMANCE CURVE

Condensing Temperature 35°C

Evaporating Temperature °C	Cooling Capacity W	Efficiency W/W	Power Consumption W	Current A	Gas Flow Rate kg/h
-40	322	1.57	206	1.78	3.24
-35	419	1.75	240	1.99	4.23
-30	537	1.95	275	2.22	5.43
-25	676	2.18	310	2.47	6.86
-20	840	2.44	344	2.71	8.55
-15	1030	2.75	375	2.95	10.53
-10	1247	3.10	402	3.16	12.81
-5	1494	3.53	423	3.34	15.42
0	1772	4.04	438	3.48	18.39
Test Condition: Liquid 32.2 °C, Return Gas 32.2 °C. Data generated in accordance to EN 12900:2013 polynomial equation and tolerance guidelines.					

PERFORMANCE CURVE

Condensing Temperature 45°C

Evaporating Temperature °C	Cooling Capacity W	Efficiency W/W	Power Consumption W	Current A	Gas Flow Rate kg/h
-40	303	1.41	214	1.82	3.05
-35	401	1.58	253	2.06	4.05
-30	518	1.76	295	2.34	5.24
-25	657	1.94	338	2.63	6.66
-20	818	2.15	381	2.93	8.32
-15	1004	2.37	423	3.22	10.26
-10	1216	2.63	462	3.50	12.49
-5	1457	2.93	497	3.76	15.04
0	1728	3.28	527	3.97	17.93
Test Condition: Liquid 32.2 °C, Return Gas 32.2 °C. Data generated in accordance to EN 12900:2013 polynomial equation and tolerance guidelines.					

PERFORMANCE CURVE				Condensing Temperature 55°C	
Evaporating Temperature °C	Cooling Capacity W	Efficiency W/W	Power Consumption W	Current A	Gas Flow Rate kg/h
-30	490	1.60	306	2.42	4.95
-25	628	1.76	357	2.76	6.36
-20	787	1.93	408	3.12	8.01
-15	971	2.11	460	3.48	9.92
-10	1179	2.31	511	3.83	12.10
-5	1415	2.53	558	4.16	14.60
0	1680	2.79	602	4.46	17.42
Test Condition: Liquid 32.2 °C, Return Gas 32.2 °C. Data generated in accordance to EN 12900:2013 polynomial equation and tolerance guidelines.					

Performance on Compressor Speed: 3600 RPM

RATED POINTS

Condensing Temperature °C	Evaporating Temperature °C	Cooling Capacity W	Efficiency W/W	Power Consumption W	Current A	Gas Flow Rate kg/h
54.4	-23.3	784	1.8	435	3.28	7.96
Test Condition: Liquid 32.2 °C, Return Gas 32.2 °C. Data generated in accordance to EN 12900:2013 polynomial equation and tolerance guidelines.						

PERFORMANCE CURVE

Condensing Temperature 35°C

Evaporating Temperature °C	Cooling Capacity W	Efficiency W/W	Power Consumption W	Current A	Gas Flow Rate kg/h
-40	358	1.46	245	2.17	3.61
-35	473	1.66	285	2.31	4.78
-30	620	1.87	331	2.58	6.27
-25	796	2.10	380	2.94	8.08
-20	1004	2.35	428	3.32	10.22
-15	1241	2.63	472	3.68	12.69
-10	1509	2.97	508	3.96	15.49
-5	1807	3.39	534	4.11	18.65
0	2135	3.92	545	4.07	22.15
Test Condition: Liquid 32.2 °C, Return Gas 32.2 °C. Data generated in accordance to EN 12900:2013 polynomial equation and tolerance guidelines.					

PERFORMANCE CURVE

Condensing Temperature 45°C

Evaporating Temperature °C	Cooling Capacity W	Efficiency W/W	Power Consumption W	Current A	Gas Flow Rate kg/h
-40	341	1.32	259	2.28	3.43
-35	451	1.51	299	2.40	4.55
-30	592	1.70	348	2.67	5.98
-25	762	1.89	403	3.04	7.73
-20	962	2.09	460	3.46	9.79
-15	1192	2.31	516	3.87	12.18
-10	1452	2.56	568	4.22	14.91
-5	1742	2.85	611	4.45	17.97
0	2060	3.20	644	4.52	21.38
Test Condition: Liquid 32.2 °C, Return Gas 32.2 °C. Data generated in accordance to EN 12900:2013 polynomial equation and tolerance guidelines.					

PERFORMANCE CURVE				Condensing Temperature 55°C	
Evaporating Temperature °C	Cooling Capacity W	Efficiency W/W	Power Consumption W	Current A	Gas Flow Rate kg/h
-30	556	1.56	356	2.74	5.62
-25	719	1.74	414	3.14	7.29
-20	911	1.91	477	3.60	9.27
-15	1133	2.09	542	4.07	11.58
-10	1384	2.28	606	4.50	14.21
-5	1665	2.50	665	4.83	17.17
0	1974	2.76	716	5.01	20.48
Test Condition: Liquid 32.2 °C, Return Gas 32.2 °C. Data generated in accordance to EN 12900:2013 polynomial equation and tolerance guidelines.					

Performance on Compressor Speed: 4500 RPM

RATED POINTS

Condensing Temperature °C	Evaporating Temperature °C	Cooling Capacity W	Efficiency W/W	Power Consumption W	Current A	Gas Flow Rate kg/h
54.4	-23.3	1003	1.75	575	4.15	10.18
Test Condition: Liquid 32.2 °C, Return Gas 32.2 °C. Data generated in accordance to EN 12900:2013 polynomial equation and tolerance guidelines.						

PERFORMANCE CURVE

Condensing Temperature 35°C

Evaporating Temperature °C	Cooling Capacity W	Efficiency W/W	Power Consumption W	Current A	Gas Flow Rate kg/h
-40	474	1.49	317	2.69	4.77
-35	611	1.65	370	2.95	6.16
-30	777	1.83	425	3.26	7.86
-25	971	2.03	479	3.61	9.85
-20	1195	2.26	530	3.98	12.17
-15	1449	2.52	574	4.34	14.81
-10	1731	2.84	609	4.68	17.77
-5	2043	3.23	632	4.97	21.08
0	2384	3.72	641	5.21	24.74
Test Condition: Liquid 32.2 °C, Return Gas 32.2 °C. Data generated in accordance to EN 12900:2013 polynomial equation and tolerance guidelines.					

PERFORMANCE CURVE

Condensing Temperature 45°C

Evaporating Temperature °C	Cooling Capacity W	Efficiency W/W	Power Consumption W	Current A	Gas Flow Rate kg/h
-40	453	1.37	330	2.64	4.56
-35	597	1.52	394	2.99	6.02
-30	765	1.67	459	3.38	7.74
-25	960	1.83	525	3.79	9.73
-20	1180	2.01	588	4.21	12.00
-15	1425	2.21	645	4.61	14.56
-10	1696	2.45	693	4.98	17.41
-5	1993	2.73	731	5.30	20.57
0	2316	3.07	754	5.54	24.03
Test Condition: Liquid 32.2 °C, Return Gas 32.2 °C. Data generated in accordance to EN 12900:2013 polynomial equation and tolerance guidelines.					

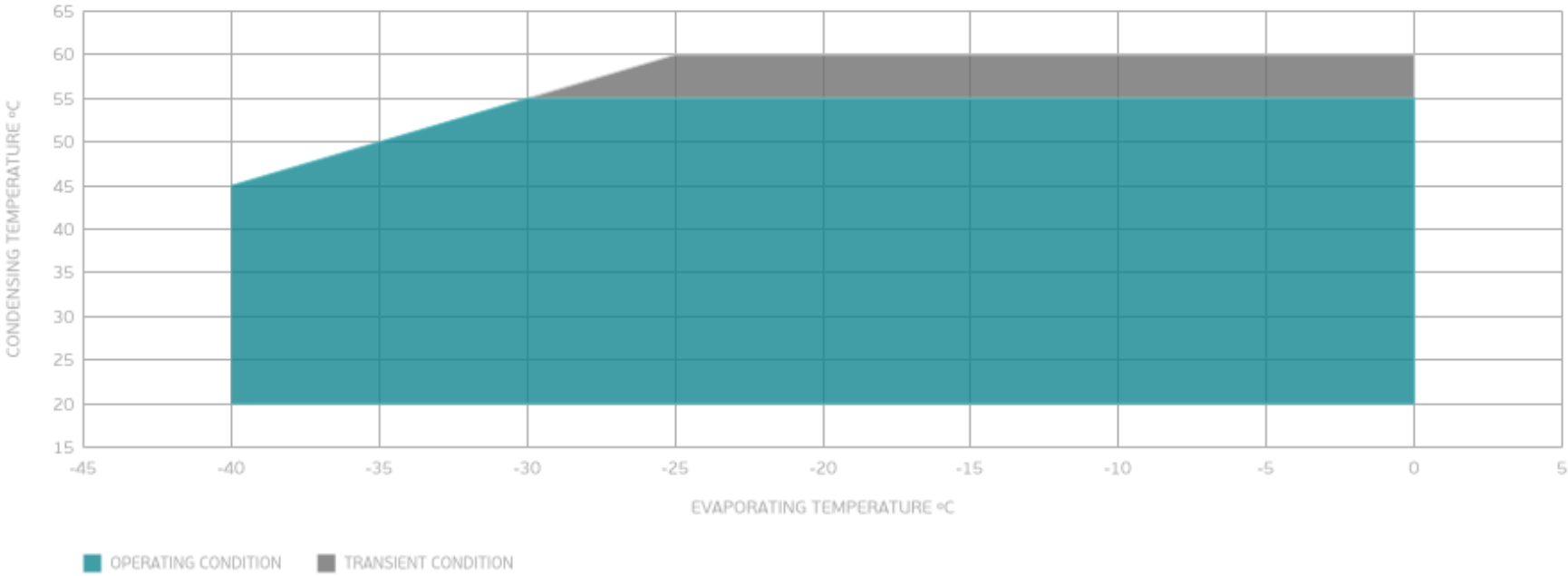
PERFORMANCE CURVE

Condensing Temperature 55°C

Evaporating Temperature °C	Cooling Capacity W	Efficiency W/W	Power Consumption W	Current A	Gas Flow Rate kg/h
-30	731	1.55	472	3.51	7.39
-25	928	1.69	550	4.00	9.41
-20	1148	1.84	625	4.48	11.68
-15	1389	2.00	695	4.93	14.19
-10	1653	2.18	758	5.34	16.96
-5	1939	2.39	810	5.68	20.00
0	2247	2.65	849	5.94	23.31

Test Condition: Liquid 32.2 °C, Return Gas 32.2 °C. Data generated in accordance to EN 12900:2013 polynomial equation and tolerance guidelines.

ENVELOPE



External

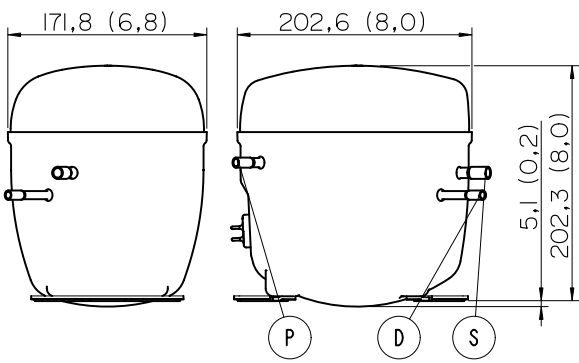
EXTERNAL CHARACTERISTICS

Base Plate	JP
Tray Holder	NO

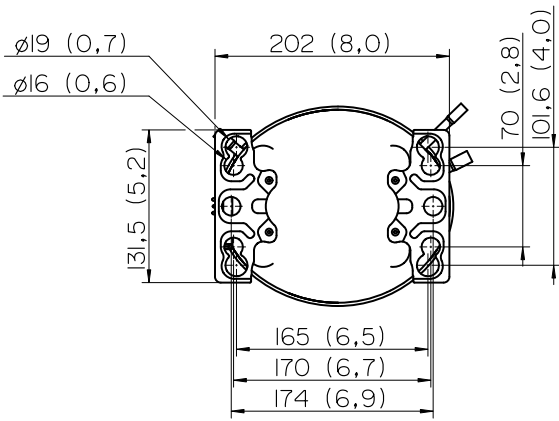
Connector	Internal Diameter	Shape	Material
Suction	8.2 mm	STRAIGHT	COPPER
Discharge	6.5 mm	STRAIGHT	COPPER
Process	6.5 mm	STRAIGHT	COPPER

EXTERNAL DIMENSIONS

SHELL



BASE



FENCE

