COMPRESSOR DEFINITION

Designation	**EM T2130GK**
Nominal Voltage/Frequency	**220-240 V 50 Hz**
Engineering Number	**913AA92**

A - APPLICATION / LIMIT WORKING CONDITIONS

1 Type	Hermetic reciprocating compressor		
2 Refrigerant	R-404A		
3 Nominal voltage and frequency	220-240 / 50	[V / Hz]	
4 Application type	Low Back Pressure R404A		
4.1 Evaporating temperature range	-40°C to -10°C	(-40°F to 14°F)	
5 Motor type	CSIR		
6 Starting torque	HST - Hight starting torque		
7 Expantion device	Capillary tube or Expansion valve		
8 Compressor cooling		Operating voltage range	
		50 Hz	60 Hz
8.1 LBP (32ºC Ambient temperature)	-	-	-
8.2 LBP (43ºC Ambient temperature)	-	-	-
8.3 HBP (32ºC Ambient temperature)	-	-	-
8.4 HBP (43ºC Ambient temperature)	-	-	-
9 Maximum condensing temperature			
9.1 Operating	25.2	[kgf/cm²] (358 psig)	/ ºC - ºF
9.2 Peak	28.3	[kgf/cm²] (402 psig)	/ ºC - ºF
10 Maximum winding temperature	130	[°C]	

B - MECHANICAL DATA

1 Commercial designation	1/2-	[hp]
2 Displacement	6.76	[cm³] (0.413 cu.in)
2.1 Bore [mm]	22.500	
2.2 Stroke [mm]	17.000	
3 Lubricant charge	180	[ml] (6.09 fl.oz.)
3.1 Lubricants approved		
3.2 Lubricants type/viscosity	ESTER / ISO22	
4 Weight (with oil charge)	8	[kg] (17.64 lb.)
5 Nitrogen charge	-	[kgf/cm²]

C - ELETRICAL DATA

1 Nominal Voltage/Frequency/Number of Phases	220-240 V 50 Hz 1 ~ (Single phase)	
2 Starting device type	Current Relay	
2.1 Starting device	MTRPH-0025-59	
3 Start capacitor	72-88(330)	[µF(VAC minimum)]
4 Run capacitor	-	[µF(VAC minimum)]
5 Motor protection	T0971/G6	
6 Start winding resistance	17.00	[Ω at 25ºC (77ºF)] +/- 8%
7 Run winding resistance	10.00	[Ω at 25ºC (77ºF)] +/- 8%
8 LRA - Locked rotor amperage (50 Hz)	12.40	[A] - Measured according to UL 984
9 FLA - Full load amperage L/MBP (50 Hz)	-	[A]
10 FLA - Full Load Amperage HBP (50 Hz)	-	[A]
11 Approval boards certification	VDE	

D - PERFORMANCE - CHECK POINT DATA

TEST CONDITIONS:			**EN12900LBP_HH**		Evaporating temperature		**-35°C (-31°F)**	
@220V50Hz			**Fan**		(Condensing temperature		**40°C (104°F))**	
Cooling capacity +/- 5%			Power consumption +/- 5%	Current consumption +/- 5%	Gas flow rate +/- 5%	EFFICIENCY RATE +/- 7%		
[Btu/h]	[kcal/h]	[W]	[W]	[A]	[kg/h]	[Btu/Wh]	[kcal/Wh]	[W/W]
758	191	222	206	1.56	5.58	3.68	0.93	1.08

E - PERFORMANCE - CURVES

TEST CONDITIONS:		**EN12900HH**					(Condensing temperature **35ºC (+95ºF))**			
@220V50Hz		**Fan**								
Evaporating temperature		Cooling capacity +/- 5%			Power consumption +/- 5%	Current consumption +/- 5%	Gas flow rate +/- 5%	EFFICIENCY RATE +/- 7%		
°C	**(°F)**	[Btu/h]	[kcal/h]	[W]	[W]	[A]	[kg/h]	[Btu/Wh]	[kcal/Wh]	[W/W]
-40	**(-40)**	640	161	188	180	1.50	4.43	3.55	0.89	1.04
-35	**(-31)**	832	210	244	203	1.55	5.79	4.11	1.04	1.20
-30	**(-22)**	1063	268	311	227	1.62	7.42	4.68	1.18	1.37
-25	**(-13)**	1337	337	392	253	1.71	9.37	5.28	1.33	1.55
-20	**(- 4)**	1658	418	486	281	1.80	11.68	5.90	1.49	1.73
-15	**(+ 5)**	2030	512	595	310	1.90	14.40	6.55	1.65	1.92
-10	**(+14)**	2457	619	720	340	2.00	17.55	7.23	1.82	2.12

TEST CONDITIONS:		**EN12900HH**					(Condensing temperature **45ºC (+113ºF))**			
@220V50Hz		**Fan**								
Evaporating temperature		Cooling capacity +/- 5%			Power consumption +/- 5%	Current consumption +/- 5%	Gas flow rate +/- 5%	EFFICIENCY RATE +/- 7%		
°C	**(°F)**	[Btu/h]	[kcal/h]	[W]	[W]	[A]	[kg/h]	[Btu/Wh]	[kcal/Wh]	[W/W]
-40	**(-40)**	511	129	150	184	1.50	3.98	2.79	0.70	0.82
-35	**(-31)**	678	171	199	209	1.56	5.30	3.24	0.82	0.95
-30	**(-22)**	877	221	257	237	1.64	6.88	3.69	0.93	1.08
-25	**(-13)**	1111	280	326	268	1.74	8.76	4.14	1.04	1.21
-20	**(- 4)**	1385	349	406	301	1.86	10.99	4.59	1.16	1.35
-15	**(+ 5)**	1702	429	499	337	1.98	13.60	5.05	1.27	1.48
-10	**(+14)**	2066	521	606	375	2.11	16.64	5.52	1.39	1.62

TEST CONDITIONS:		**EN12900HH**					(Condensing temperature **55ºC (+131ºF))**			
@220V50Hz		**Fan**								
Evaporating temperature		Cooling capacity +/- 5%			Power consumption +/- 5%	Current consumption +/- 5%	Gas flow rate +/- 5%	EFFICIENCY RATE +/- 7%		
°C	**(°F)**	[Btu/h]	[kcal/h]	[W]	[W]	[A]	[kg/h]	[Btu/Wh]	[kcal/Wh]	[W/W]
-40	**(-40)**	389	98	114	185	1.50	3.50	2.10	0.53	0.62
-35	**(-31)**	532	134	156	214	1.56	4.81	2.49	0.63	0.73
-30	**(-22)**	701	177	205	246	1.66	6.36	2.85	0.72	0.83
-25	**(-13)**	897	226	263	281	1.78	8.19	3.19	0.80	0.93
-20	**(- 4)**	1126	284	330	321	1.92	10.36	3.52	0.89	1.03
-15	**(+ 5)**	1390	350	407	364	2.08	12.90	3.83	0.96	1.12
-10	**(+14)**	1695	427	497	410	2.25	15.85	4.13	1.04	1.21

F - EXTERNAL CHARACTERISTICS

1 Base plate	European Standard		
2 Tray holder	No		
3 Connectors			
3.1 SUCTION	6.1 +0.10/+0.00	[mm]	(0.240" +0.004"/+0.000")
3.1.1 Material	Copper		
3.1.2 Shape	Slanted 42°		
3.2 DISCHARGE	4.94 +0.08/-0.08	[mm]	(0.194" +0.003"/-0.003")
3.2.1 Material	Copper		
3.2.2 Shape	Straight		
3.3 PROCESS	6 +0.08/-0.08	[mm]	(0.236" +0.003"/-0.003")
3.3.1 Material	Copper(OD)		
3.3.2 Shape	Slanted 42°		
3.4 Oil cooler (Copper)	No	[mm]	
3.5 Connector sealing	Rubber Plugs		