COMPRESSOR DEFINITION

Designation	**EH U2155U**
Nominal Voltage/Frequency	**220-240 V 50 Hz**
Engineering Number	**513307567**

A - APPLICATION / LIMIT WORKING CONDITIONS

1 Type	Hermetic reciprocating compressor		
2 Refrigerant	R-290		
3 Nominal voltage and frequency	220-240 / 50	[V / Hz]	
4 Application type	Low Back Pressure R290		
4.1 Evaporating temperature range	-40°C to -10°C	(-40°F to 14°F)	
5 Motor type	CSIR		
6 Starting torque	LST/HST - Low/Hight starting sorque		
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)	Fan	198 to 255 V	-
8.3 HBP (32ºC Ambient temperature)	-	-	-
8.4 HBP (43ºC Ambient temperature)	-	-	-
9 Maximum condensing temperature			
9.1 Operating	18.4	[kgf/cm²] (262 psig)	/ ºC - ºF
9.2 Peak	20.6	[kgf/cm²] (293 psig)	/ ºC - ºF
10 Maximum winding temperature	130	[°C]	

B - MECHANICAL DATA

1 Commercial designation	3/4	[hp]
2 Displacement	12.21	[cm³] (0.745 cu.in)
2.1 Bore [mm]	26.000	
2.2 Stroke [mm]	23.000	
3 Lubricant charge	270	[ml] (9.13 fl.oz.)
3.1 Lubricants approved		
3.2 Lubricants type/viscosity	ALQUILB / ISO22	
4 Weight (with oil charge)	9.4	[kg] (20.72 lb.)
5 Nitrogen charge	-	[kgf/cm²]

C - ELECTRICAL 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	213515053	
3 Start capacitor	88-108(330)	[µF(VAC minimum)]
4 Run capacitor	-	[µF(VAC minimum)]
5 Motor protection	4TM757NFBYY-53	
6 Start winding resistance	14.95	[Ω at 25ºC (77ºF)] +/- 8%
7 Run winding resistance	6.56	[Ω at 25ºC (77ºF)] +/- 8%
8 LRA - Locked rotor amperage (50 Hz)	18.80	[A] - Measured according to UL 984
9 FLA - Full load amperage L/MBP (50 Hz)	-	[A] - Measured according to UL 984
10 FLA - Full Load Amperage HBP (50 Hz)	-	[A] - Measured according to UL 984
11 Approval boards certification	CCC - VDE	

D - PERFORMANCE - CHECK POINT DATA

TEST CONDITIONS:			**ASHRAELBP32**			Evaporating temperature		**-23.3°C (-9.94°F)**
@220V50Hz			**Fan**			(Condensing temperature		**54.4°C (129.92°F))**
Cooling capacity (Qe) +/- 5%			Input power (We) +/- 5%	Electric current +/- 5%	Mass flow rate +/- 5%	Efficiency EER & COP +/- 7%		
[Btu/h]	[kcal/h]	[W]	[W]	[A]	[kg/h]	[Btu/Wh]	[kcal/Wh]	[W/W]
2034	513	596	392	2.33	6.05	5.19	1.31	1.52

E - PERFORMANCE - CURVES

TEST CONDITIONS:		**ASHRAE32**					(Condensing temperature **35ºC (+95ºF))**			
@220V50Hz		**Fan**								
Evaporating temperature		Cooling capacity (Qe) +/- 5%			Input power (We) +/- 5%	Electric current +/- 5%	Mass flow rate +/- 5%	Efficiency EER & COP +/- 7%		
°C	**(°F)**	[Btu/h]	[kcal/h]	[W]	[W]	[A]	[kg/h]	[Btu/Wh]	[kcal/Wh]	[W/W]
-40	**(-40)**	1023	258	300	234	1.83	3.02	4.36	1.10	1.28
-35	**(-31)**	1317	332	386	265	1.91	3.90	4.96	1.25	1.45
-30	**(-22)**	1664	419	488	297	2.00	4.93	5.60	1.41	1.64
-25	**(-13)**	2073	522	607	329	2.11	6.17	6.30	1.59	1.85
-20	**(- 4)**	2554	644	748	362	2.22	7.62	7.06	1.78	2.07
-15	**(+ 5)**	3117	785	913	394	2.34	9.34	7.91	1.99	2.32
-10	**(+14)**	3771	950	1105	425	2.46	11.35	8.87	2.23	2.60

TEST CONDITIONS:		**ASHRAE32**					(Condensing temperature **45ºC (+113ºF))**			
@220V50Hz		**Fan**								
Evaporating temperature		Cooling capacity (Qe) +/- 5%			Input power (We) +/- 5%	Electric current +/- 5%	Mass flow rate +/- 5%	Efficiency EER & COP +/- 7%		
°C	**(°F)**	[Btu/h]	[kcal/h]	[W]	[W]	[A]	[kg/h]	[Btu/Wh]	[kcal/Wh]	[W/W]
-40	**(-40)**	961	242	281	244	1.85	2.84	3.95	1.00	1.16
-35	**(-31)**	1248	314	366	279	1.95	3.69	4.48	1.13	1.31
-30	**(-22)**	1585	399	465	316	2.06	4.70	5.02	1.26	1.47
-25	**(-13)**	1982	500	581	354	2.19	5.89	5.59	1.41	1.64
-20	**(- 4)**	2448	617	717	394	2.34	7.30	6.21	1.56	1.82
-15	**(+ 5)**	2993	754	877	435	2.50	8.96	6.88	1.73	2.02
-10	**(+14)**	3626	914	1062	476	2.66	10.91	7.63	1.92	2.24

TEST CONDITIONS:		**ASHRAE32**					(Condensing temperature **55ºC (+131ºF))**			
@220V50Hz		**Fan**								
Evaporating temperature		Cooling capacity (Qe) +/- 5%			Input power (We) +/- 5%	Electric current +/- 5%	Mass flow rate +/- 5%	Efficiency EER & COP +/- 7%		
°C	**(°F)**	[Btu/h]	[kcal/h]	[W]	[W]	[A]	[kg/h]	[Btu/Wh]	[kcal/Wh]	[W/W]
-40	**(-40)**	879	222	258	251	1.89	2.59	3.50	0.88	1.03
-35	**(-31)**	1160	292	340	290	1.99	3.43	3.99	1.01	1.17
-30	**(-22)**	1487	375	436	333	2.13	4.41	4.47	1.13	1.31
-25	**(-13)**	1872	472	548	378	2.28	5.56	4.96	1.25	1.45
-20	**(- 4)**	2322	585	680	425	2.46	6.93	5.46	1.38	1.60
-15	**(+ 5)**	2849	718	835	475	2.65	8.53	6.00	1.51	1.76
-10	**(+14)**	3461	872	1014	526	2.86	10.41	6.58	1.66	1.93

F - EXTERNAL CHARACTERISTICS

1 Base plate	European Standard EUEM		
2 Tray holder	No		
3 Connectors			
3.1 SUCTION	6.2 +0.05/+0.05	[mm]	(0.244" +0.002"/+0.002")
3.1.1 Material	Copper		
3.1.2 Shape	Slanted 40° up + 45° to Back		
3.2 DISCHARGE	4.9 +0.10/-0.05	[mm]	(0.193" +0.004"/-0.002")
3.2.1 Material	Copper		
3.2.2 Shape	Slanted 0° up + 24° to Back		
3.3 PROCESS	6.2 +0.05/+0.05	[mm]	(0.244" +0.002"/+0.002")
3.3.1 Material	Copper		
3.3.2 Shape	Slanted 40° up + 45° to Back		
3.4 Oil cooler (Copper)	No	[mm]	
3.5 Connector sealing	Rubber Plugs		