COMPRESSOR DEFINITION

Designation	**NE U2155U**
Nominal Voltage/Frequency	**220-240 V 50 Hz**
Engineering Number	**862OA51**

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	CSCR		
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	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	13.54	[cm³] (0.826 cu.in)
2.1 Bore [mm]	29.362	
2.2 Stroke [mm]	20.000	
3 Lubricant charge	350	[ml] (11.84 fl.oz.)
3.1 Lubricants approved		
3.2 Lubricants type/viscosity	AB / ISO32	
4 Weight (with oil charge)	10.3	[kg] (22.71 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	Voltage Relay	
2.1 Starting device	RVA4L3C-566	
3 Start capacitor	64-77(330)	[µF(VAC minimum)]
4 Run capacitor	5(400)	[µF(VAC minimum)]
5 Motor protection	MST30APK-3261	
6 Start winding resistance	14.10	[Ω at 25ºC (77ºF)] +/- 8%
7 Run winding resistance	5.97	[Ω at 25ºC (77ºF)] +/- 8%
8 LRA - Locked rotor amperage (50 Hz)	17.50	[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 - CE - UKCA - 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 (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]
1255	316	368	285	1.52	3.97	4.40	1.11	1.29

E - PERFORMANCE - CURVES

TEST CONDITIONS:		**EN12900HH**					(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)**	1085	273	318	244	1.33	3.28	4.44	1.12	1.30
-35	**(-31)**	1394	351	409	277	1.46	4.22	5.03	1.27	1.47
-30	**(-22)**	1783	449	522	311	1.59	5.41	5.74	1.45	1.68
-25	**(-13)**	2251	567	660	343	1.73	6.86	6.56	1.65	1.92
-20	**(- 4)**	2799	705	820	376	1.87	8.55	7.45	1.88	2.18
-15	**(+ 5)**	3426	863	1004	407	2.00	10.51	8.41	2.12	2.46
-10	**(+14)**	4133	1042	1211	439	2.14	12.74	9.41	2.37	2.76

TEST CONDITIONS:		**EN12900HH**					(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)**	923	233	270	255	1.37	3.04	3.63	0.91	1.06
-35	**(-31)**	1197	302	351	293	1.52	3.96	4.09	1.03	1.20
-30	**(-22)**	1542	388	452	331	1.68	5.11	4.65	1.17	1.36
-25	**(-13)**	1956	493	573	370	1.84	6.50	5.28	1.33	1.55
-20	**(- 4)**	2442	615	715	409	2.01	8.15	5.96	1.50	1.75
-15	**(+ 5)**	2997	755	878	449	2.18	10.05	6.68	1.68	1.96
-10	**(+14)**	3623	913	1062	489	2.36	12.20	7.42	1.87	2.17

TEST CONDITIONS:		**EN12900HH**					(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)**	768	194	225	259	1.39	2.80	2.96	0.75	0.87
-35	**(-31)**	1011	255	296	302	1.56	3.70	3.35	0.84	0.98
-30	**(-22)**	1315	331	385	347	1.75	4.82	3.79	0.95	1.11
-25	**(-13)**	1680	423	492	393	1.94	6.18	4.28	1.08	1.25
-20	**(- 4)**	2106	531	617	440	2.15	7.78	4.79	1.21	1.40
-15	**(+ 5)**	2594	654	760	489	2.37	9.63	5.31	1.34	1.56
-10	**(+14)**	3142	792	921	539	2.59	11.73	5.82	1.47	1.71

F - EXTERNAL CHARACTERISTICS

1 Base plate	European Standard		
2 Tray holder	No		
3 Connectors			
3.1 SUCTION	8.1 +0.10/+0.00	[mm]	(0.319" +0.004"/+0.000")
3.1.1 Material	Copper		
3.1.2 Shape	Slanted 42°		
3.2 DISCHARGE	6.1 +0.10/+0.00	[mm]	(0.240" +0.004"/+0.000")
3.2.1 Material	Copper		
3.2.2 Shape	Straight		
3.3 PROCESS	6.1 +0.10/+0.00	[mm]	(0.240" +0.004"/+0.000")
3.3.1 Material	Copper		
3.3.2 Shape	Slanted 42°		
3.4 Oil cooler (Copper)	No	[mm]	
3.5 Connector sealing	Rubber Plugs		