



اطلاعات فنی | TECHNICAL DATA

NOVA	MODEL	NOVA.663F4		NOVA.783F6		NOVA.793F6	
		ECO.M1	HE.M1	ECO.M1	HE.M1	ECO.M1	HE.M1
Type		screw	screw	screw	screw	screw	screw
System		air cooled	air cooled	air cooled	air cooled	air cooled	air cooled
Cooling capacity	kW	238	245	427	441	465	482
Compressor E.E.R.	kW/kW	3.73	4.04	3.56	3.9	3.32	3.67
E.E.R.	kW/kW	3.39	3.58	3.3	3.54	3.11	3.37
Inlet water fluid temperature	°C	12	12	12	12	12	12
Outlet water fluid temperature	°C	7	7	7	7	7	7
Fluid type	Type	water	water	water	water	water	water
Minimum ambient temperature	°C	0	0	0	0	0	0
Maximum ambient temperature at 100% load	°C	50	52	48	50	46	48
Design ambient temperature	°C	35	35	35	35	35	35
Elevation a.s.l.	m	0	0	0	0	0	0
Type of refrigerant gas	R	134a	134a	134a	134a	134a	134a
Number of refrigerating circuits	N°	2	2	2	2	2	2
Electrical feed according EN 60204-1	V/ph/Hz	400/3/50	400/3/50	400/3/50	400/3/50	400/3/50	400/3/50
Electrical cabinet	IP	54	54	54	54	54	54
COMPRESSOR DATA							
Number of compressors	N°	2	2	2	2	2	2
Total compressors nominal absorbed power	kW	63.87	60.68	119.84	112.95	139.87	131.37
Total compressors running current RLA	A	110.09	105.7	194.75	184.47	227.58	214.94
Starting Method	Type	Part-Winding	Part-Winding	Part-Winding	Part-Winding	Part-Winding	Part-Winding
Max peak start current per compressor LRA	A	269/508	269/508	479/790	479/790	516/887	516/887
Max absorbed working current per compressor FLA	A	108.0	108.0	170.0	170.0	180.0	180.0
Partition steps per compressor	%	Continuous	Continuous	Continuous	Continuous	Continuous	Continuous
ECONOMIZER DATA							
Economizer	Type	Plate	Plate	Plate	Plate	Plate	Plate
EVAPORATOR DATA							
Type of evaporator	Type	PLATE	PLATE	SHELL&TUBE	ST	ST	ST
Approval		PED	PED	PED	PED	PED	PED
Nominal flow rate	m3/h	40.81	42.01	73.22	75.62	79.74	82.65
Minimum flow rate	m3/h	30	30	42	44	51	48
Maximum flow rate	m3/h	80	80	85	88	102	96
Pressure drops	kPa	20.81	21.91	68.67	72.47	56.63	60.64
Hydraulic connections	DN	100	100	100	100	125	125
AIR AXIAL FANS AND CONDENSER DATA							
Number of condenser coils	N°	4	4	4	4	4	4
Number of fans	N°	4	4	6	6	6	6
Total absorbed power	kW	6.40	7.84	9.60	11.76	9.60	11.76
Total absorbed current	A	13.44	13.20	20.16	19.80	20.16	19.80
Total air flow	m3/h	71651	81515	107476	122272	107476	122272
TOTAL ELECTRIC DATA (for standard configuration)							
Nominal absorbed power	kW	70.27	68.52	129.44	124.71	149.47	143.13
Maximum absorbed power	kW	138	140	216	219	236	239
Maximum absorbed current (FLA)	A	232	232	363	363	383	383
Maximum peak current (LRA)	A	667	667	1040	1040	1147	1147
Maximum peak current with soft-start (LRA) (SF option)	A	565	565	882	882	969	969
NOISE DATA AT 10m ACCORDING ISO3744*							
Sound pressure level	dBA	64.5	64.9	68.7	68.9	68.7	69.0
Sound pressure level (low noise version) (LNX option)	dBA	60.8	61.8	64.2	64.7	64.2	65.0
Sound pressure level (extra low noise version) (ELN option)	dBA	59.9	60.5	63.8	64.1	63.8	64.3
DIMENSIONS**							
Structure in galvanized steel	RAL	7035	7035	7035	7035	7035	7035
Length	mm	3100	3100	4050	4050	4050	4050
Width	mm	2210	2210	2210	2210	2210	2210
Height	mm	2500	2500	2500	2500	2500	2500
WEIGHT							
Empty	kg	3150	3150	4150	4150	4470	4470
FREE SPACE							
Electrical panel side	mm	1500	1500	1500	1500	1500	1500
Opposite side of electrical panel	mm	1500	1500	1500	1500	1500	1500
Condensing coil sides	mm	2500	2500	2500	2500	2500	2500

NOTE

All data subject to change
M1 - HIGH AMBIENT MOTOR VERSION
HE - HIGH EFFICIENCY VERSION
With glycol percentage > 30% and leaving water temperature < 0°C, pump need to be checked by technical department
With ambient temperature > 40°C, TR45 option required with ambient temperature > 45°C, TR50 option required
With ambient temperature between 0°C and -15°C, Low temperature (LT) option required



اطلاعات فنی | TECHNICAL DATA

NOVA	MODEL	NOVA.863F6		NOVA.873F8		NOVA.883F8		NOVA.893F10	
		ECO.M1	HE.M1	ECO.M1	HE.M1	ECO.M1	HE.M1	ECO.M1	HE.M1
Type		screw	screw	screw	screw	screw	screw	screw	screw
System		air cooled	air cooled	air cooled	air cooled	air cooled	air cooled	air cooled	air cooled
Cooling capacity	kW	514	529	596	616	643	667	754	777
Compressor E.E.R.	kW/kW	3.22	3.5	3.49	3.87	3.18	3.56	3.51	3.87
E.E.R.	kW/kW	3.04	3.25	3.25	3.52	2.99	3.28	3.26	3.53
Inlet water fluid temperature	°C	12	12	12	12	12	12	12	12
Outlet water fluid temperature	°C	7	7	7	7	7	7	7	7
Fluid type	Type	water	water	water	water	water	water	water	water
Minimum ambient temperature	°C	0	0	0	0	0	0	0	0
Maximum ambient temperature at 100% load	°C	44	46	46	50	44	48	46	50
Design ambient temperature	°C	35	35	35	35	35	35	35	35
Elevation a.s.l.	m	0	0	0	0	0	0	0	0
Type of refrigerant gas	R	134a	134a	134a	134a	134a	134a	134a	134a
Number of refrigerating circuits	N°	2	2	2	2	2	2	2	2
Electrical feed according EN 60204-1	V/ph/Hz	400/3/50	400/3/50	400/3/50	400/3/50	400/3/50	400/3/50	400/3/50	400/3/50
Electrical cabinet	IP	54	54	54	54	54	54	54	54
COMPRESSOR DATA									
Number of compressors	N°	2	2	2	2	2	2	2	2
Total compressors nominal absorbed power	kW	159.45	151.17	170.73	159.17	202.07	187.55	215.12	200.77
Total compressors running current RLA	A	265.09	252.74	283.78	266.67	332.28	309.21	367.49	346.03
Starting Method	Type	Part-Winding	Part-Winding	Part-Winding	Part-Winding	Part-Winding	Part-Winding	Part-Winding	Part-Winding
Max peak start current per compressor LRA	A	612/943	612/943	665/1023	665/1023	729/1114	729/1114	757/1181	757/1181
Max absorbed working current per compressor FLA	A	216	216	246	246	260	260	310	310
Partition steps per compressor	%	Continuous	Continuous	Continuous	Continuous	Continuous	Continuous	Continuous	Continuous
ECONOMIZER DATA									
Economizer	Type	Plate	Plate	Plate	Plate	Plate	Plate	Plate	Plate
EVAPORATOR DATA									
Type of evaporator	Type	ST	ST	ST	ST	ST	ST	ST	ST
Approval		PED	PED	PED	PED	PED	PED	PED	PED
Nominal flow rate	m ³ /h	88.14	90.71	102.2	105.63	110.26	103.98	129.3	133.24
Minimum flow rate	m ³ /h	51	48	72	75	59	56	82	78
Maximum flow rate	m ³ /h	102	96	145	150	117	112	165	155
Pressure drops	kPa	67.45	71.55	61.64	65.54	68.58	61.03	63.7	67.64
Hydraulic connections	DN	125	125	150	150	150	150	150	150
AIR AXIAL FANS AND CONDENSER DATA									
Number of condenser coils	N°	4	4	4	4	4	4	4	4
Number of fans	N°	6	6	8	8	8	8	10	10
Total absorbed power	kW	9.78	11.76	12.80	15.68	12.8	15.68	16	19.6
Total absorbed current	A	20.28	19.80	26.88	26.40	26.88	26.4	33.6	33
Total air flow	m ³ /h	103603	122272	143302	163030	143302	163030	179127	203787
TOTAL ELECTRIC DATA (for standard configuration)									
Nominal absorbed power	kW	169.23	162.93	183.53	174.85	214.87	203.23	231.12	220.37
Maximum absorbed power	kW	276	279	316	320	336	340	391	398
Maximum absorbed current (FLA)	A	455	455	523	523	551	551	659	659
Maximum peak current (LRA)	A	1255	1255	1381	1381	1490	1490	1635	1635
Maximum peak current with soft-start (LRA) (SF option)	A	1066	1066	1176	1176	1267	1267	1398	1398
NOISE DATA AT 10m ACCORDING ISO3744*									
Sound pressure level	dBA	67.5	67.7	67.9	68.10	68.8	69	69	69.1
Sound pressure level (low noise version) (LNX option)	dBA	63.3	63.8	63.5	64.10	64.3	64.8	64.5	64.9
Sound pressure level (extra low noise version) (ELN option)	dBA	62.8	63.0	63.0	63.40	63.9	64.2	64.1	64.4
DIMENSIONS**									
Structure in galvanized steel	RAL	7035	7035	7035	7035	7035	7035	7035	7035
Length	mm	4050	4050	5000	5000	5000	5000	5950	5950
Width	mm	2210	2210	2210	2210	2210	2210	2210	2210
Height	mm	2500	2500	2500	2500	2500	2500	2500	2500
WEIGHT									
Empty	kg	4700	4700	5250	5250	5400	5400	6300	6300
FREE SPACE									
Electrical panel side	mm	1500	1500	1500	1500	1500	1500	1500	1500
Opposite side of electrical panel	mm	1500	1500	1500	1500	1500	1500	1500	1500
Condensing coil sides	mm	2500	2500	2500	2500	2500	2500	2500	2500

NOTE

- All data subject to change
- M1 - HIGH AMBIENT MOTOR VERSION
- HE - HIGH EFFICIENCY VERSION
- With glycol percentage > 30% and leaving water temperature < 0°C, pump need to be checked by technical department
- With ambient temperature > 40°C, TR45 option required with ambient temperature > 45°C, TR50 option required
- With ambient temperature between 0°C and -15°C, Low temperature (LT) option required



اطلاعات فنی | TECHNICAL DATA

NOVA	MODEL	NOVA.963F12		NOVA.973F12		NOVA.983F14	
		ECO.M1	HE.M1	ECO.M1	HE.M1	ECO.M1	HE.M1
Type		screw	screw	screw	screw	screw	screw
System		air cooled	air cooled	air cooled	air cooled	air cooled	air cooled
Cooling capacity	kW	876	905	942	977	1090	1132
Compressor E.E.R.	kW/kW	3.61	3.94	3.4	3.73	3.52	3.86
E.E.R.	kW/kW	3.34	3.56	3.17	3.42	3.28	3.52
Inlet water fluid temperature	°C	12	12	12	12	12	12
Outlet water fluid temperature	°C	7	7	7	7	7	7
Fluid type	Type	water	water	water	water	water	water
Minimum ambient temperature	°C		0				
Maximum ambient temperature at 100% load	°C	48	50	48	48	46	48
Design ambient temperature	°C	35	35	35	35	35	35
Elevation a.s.l.	m	0	0	0	0	0	0
Type of refrigerant gas	R	134a	134a	134a	134a	134a	134a
Number of refrigerating circuits	N°	2	2	2	2	2	2
Electrical feed according EN 60204-1	V/ph/Hz	400/3/50	400/3/50	400/3/50	400/3/50	400/3/50	400/3/50
Electrical cabinet	IP	54	54	54	54	54	54
COMPRESSOR DATA							
Number of compressors	N°	2	2	2	2	2	2
Total compressors nominal absorbed power	kW	242.49	229.93	276.97	261.58	309.45	292.95
Total compressors running current RLA	A	400.04	381.14	453.79	430.22	507.12	482.27
Starting Method	Type	Star-Delta	Star-Delta	Star-Delta	Star-Delta	Star-Delta	Star-Delta
Max peak start current per compressor LRA	A	586/1853	586/1853	650/2029	650/2029	805/2520	805/2520
Max absorbed working current per compressor FLA	A	370	370	420	420	450	450
Partition steps per compressor	%	Continuous	Continuous	Continuous	Continuous	Continuous	Continuous
ECONOMIZER DATA							
Economizer	Type	Plate	Plate	Plate	Plate	Plate	Plate
EVAPORATOR DATA							
Type of evaporator	Type	ST	ST	ST	ST	ST	ST
Approval		PED	PED	PED	PED	PED	PED
Nominal flow rate	m ³ /h	150.22	155.19	161.54	167.54	186.91	194.12
Minimum flow rate	m ³ /h	106	110	103	97	119	124
Maximum flow rate	m ³ /h	213	220	206	194	238	247
Pressure drops	kPa	65.58	68.64	61.57	65.64	64.66	68.66
Hydraulic connections	DN	150	150	150	150	200	200
AIR AXIAL FANS AND CONDENSER DATA							
Number of condenser coils	N°	4	4	4	4	4	4
Number of fans	N°	12	12	12	12	14	14
Total absorbed power	kW	19.8	24.48	19.8	24.48	23.1	28.56
Total absorbed current	A	40.92	40.8	40.92	40.8	47.74	47.6
Total air flow	m ³ /h	199461	226261	199461	226261	232704	263971
TOTAL ELECTRIC DATA (for standard configuration)							
Nominal absorbed power	kW	262.29	254.41	296.77	286.06	332.55	321.51
Maximum absorbed power	kW	515	523	533	541	587	596
Maximum absorbed current (FLA)	A	787	787	887	887	955	955
Maximum peak current (LRA)	A	2370	2370	2637	2637	3167	3167
Maximum peak current with soft-start (LRA) (SF option)	A	2000	2000	2232	2232	2663	2663
NOISE DATA AT 10m ACCORDING ISO3744*							
Sound pressure level	dBA	69.9	70.1	70.7	70.9	71.5	71.6
Sound pressure level (low noise version) (LNX option)	dBA	65.4	66	66.2	66.6	66.9	67.3
Sound pressure level (extra low noise version) (ELN option)	dBA	65	65.3	65.9	66.1	66.6	66.8
DIMENSIONS**							
Structure in galvanized steel	RAL	7035	7035	7035	7035	7035	7035
Length	mm	6900	6900	6900	6900	7850	7850
Width	mm	2210	2210	2210	2210	2210	2210
Height	mm	2500	2500	2500	2500	2500	2500
WEIGHT							
Empty	kg	7100	7100	7250	7250	8000	8000
FREE SPACE							
Electrical panel side	mm	1500	1500	1500	1500	1500	1500
Opposite side of electrical panel	mm	1500	1500	1500	1500	1500	1500
Condensing coil sides	mm	2500	2500	2500	2500	2500	2500

NOTE

All data subject to change
M1 - HIGH AMBIENT MOTOR VERSION
HE - HIGH EFFICIENCY VERSION
With glycol percentage > 30% and leaving water temperature < 0°C, pump need to be checked by technical department
With ambient temperature > 40°C, TR45 option required with ambient temperature > 45°C, TR50 option required
With ambient temperature between 0°C and -15°C, Low temperature (LT) option required



اطلاعات فنی | TECHNICAL DATA

NOVA	MODEL	NOVA.983F24		NOVA.993F18		NOVA.993F24		NOVA.9103F18	
		ECO.M1	HE.M1	ECO.M1	HE.M1	ECO.M1	HE.M1	ECO.M1	HE.M1
Type		screw	screw	screw	screw	screw	screw	screw	screw
System		air cooled	air cooled	air cooled	air cooled	air cooled	air cooled	air cooled	air cooled
Cooling capacity	kW	1644	1704	1286	1290	1815	1865	1359	1407
Compressor E.E.R.	kW/kW	3.59	3.94	3.68	3.96	3.50	3.74	3.36	3.64
E.E.R.	kW/kW	3.18	3.38	3.39	3.56	3.14	3.27	3.13	3.32
Inlet water fluid temperature	°C	12	12	12	12	12	12	12	12
Outlet water fluid temperature	°C	7	7	7	7	7	7	7	7
Fluid type	Type	water	water	water	water	water	water	water	water
Minimum ambient temperature	°C	0	0	0	0	0	0	0	0
Maximum ambient temperature at 100% load	°C	46	50	46	48	46	48	46	48
Design ambient temperature	°C	35	35	35	35	35	35	35	35
Elevation a.s.l.	m	0	0	0	0	0	0	0	0
Type of refrigerant gas	R	134a	134a	134a	134a	134a	134a	134a	134a
Number of refrigerating circuits	N°	3	3	2	2	3	3	2	2
Electrical feed according EN 60204-1	V/ph/Hz	400/3/50	400/3/50	400/3/50	400/3/50	400/3/50	400/3/50	400/3/50	400/3/50
Electrical cabinet	IP	54	54	54	54	54	54	54	54
COMPRESSOR DATA									
Number of compressors	N°	3	3	2	2	3	3	2	2
Total compressors nominal absorbed power	kW	304.89	288.52	349.19	325.91	345.38	332.13	404.15	386.49
Total compressors running current RLA	A	500.24	475.63	567.46	532.05	561.66	541.5	659.11	631.96
Starting Method	Type	Star-Delta	Star-Delta	Star-Delta	Star-Delta	Star-Delta	Star-Delta	Star-Delta	Star-Delta
Max peak start current per compressor LRA	A	805/2520	805/2520	805/2520	805/2520	805/2520	805/2520	917/2870	917/2870
Max absorbed working current per compressor FLA	A	450	450	450	450	450	450	566	566
Partition steps per compressor	%	Continuous	Continuous	Continuous	Continuous	Continuous	Continuous	Continuous	Continuous
ECONOMIZER DATA									
Economizer	Type	Plate	Plate	Plate	Plate	Plate	Plate	Plate	Plate
EVAPORATOR DATA									
Type of evaporator	Type	ST	ST	ST	ST	ST	ST	ST	ST
Approval		PED	PED	PED	PED	PED	PED	PED	PED
Nominal flow rate	m ³ /h	281.92	292.2	220.53	221.21	311.24	319.81	233.04	241.27
Minimum flow rate	m ³ /h	200	186	141	142	198	185	149	154
Maximum flow rate	m ³ /h	399	372	281	284	397	371	297	307
Pressure drops	kPa	63.65	68.53	76.53	76.52	76.58	79.51	80.48	85.56
Hydraulic connections	DN	250	250	200	200	250	250	200	200
AIR AXIAL FANS AND CONDENSER DATA									
Number of condenser coils	N°	12	12	4	4	12	12	4	4
Number of fans	N°	24	24	18	18	24	24	18	18
Total absorbed power	kW	38.88	47.76	29.7	36.72	39.6	47.76	30.24	36.72
Total absorbed current	A	80.88	80.16	61.38	61.2	81.84	80.16	62.1	61.2
Total air flow	m ³ /h	420610	475792	299191	339391	402020	475792	285249	339391
TOTAL ELECTRIC DATA (for standard configuration)									
Nominal absorbed power	kW	343.77	336.28	378.89	362.63	384.98	379.89	434.39	423.21
Maximum absorbed power	kW	887	901	595	606	887	901	699	710
Maximum absorbed current (FLA)	A	1444	1444	970	970	1444	1444	1202	1202
Maximum peak current (LRA)	A	3637	3637	3175	3175	3637	3637	3705	3705
Maximum peak current with soft-start (LRA) (SF option)	A	3133	3133	2671	2671	3133	3133	3131	3131
NOISE DATA AT 10m ACCORDING ISO3744*									
Sound pressure level	dBA	73.4	73.6	71.5	71.6	73.4	73.6	72.1	72.2
Sound pressure level (low noise version) (LNX option)	dBA	69	69.5	66.9	67.3	69.1	69.5	67.5	67.8
Sound pressure level (extra low noise version) (ELN option)	dBA	68.5	68.9	66.6	66.8	68.6	68.9	67.2	67.4
DIMENSIONS**									
Structure in galvanized steel	RAL	7035	7035	7035	7035	7035	7035	7035	7035
Length	mm	12880	12880	9750	9750	12880	12880	9750	9750
Width	mm	2210	2210	2210	2210	2210	2210	2210	2210
Height	mm	2500	2500	2500	2500	2500	2500	2500	2500
WEIGHT									
Empty	kg	11300	11300	9200	9200	11600	11600	9400	9400
FREE SPACE									
Electrical panel side	mm	1500	1500	1500	1500	1500	1500	1500	1500
Opposite side of electrical panel	mm	1500	1500	1500	1500	1500	1500	1500	1500
Condensing coil sides	mm	2500	2500	2500	2500	2500	2500	2500	2500

NOTE

All data subject to change
M1 - HIGH AMBIENT MOTOR VERSION
HE - HIGH EFFICIENCY VERSION
With glycol percentage > 30% and leaving water temperature < 0°C, pump need to be checked by technical department
With ambient temperature > 40°C, TR45 option required with ambient temperature > 45°C, TR50 option required
With ambient temperature between 0°C and -15°C, Low temperature (LT) option required