ATO / ATU 20÷90

ATO / ATU

Close control air conditioner

Type: DUAL FLUID, WATER COOLED, upflow or downflow version

Configurations

BASIC
For applications up to 32°C air intake

SMART
For applications up to 40°C air intake

Versions

BASIC Cooling only without condensation control device

MOD_A Cooling only with condensation control device with speed regulation for external unit. **For closed circuit installation**

MOD_B Cooling only with condensation control device with pressure valve. **For open circuit installation (well water)**

UNIT DESCRIPTION

Ductable close control air-conditioning units with capacity ranging from 25 to 102 kW for vertical installation and cooling only, with optional heating by means of heating elements and hot water, optional humidifier and dehumidifier for precise temperature and humidity control.
Units are fitted with EC fans (upflow or downflow) and are connected to two circuits: a PRIMARY chilled water circuit connected to an external chiller, and a SECONDARY circuit working as back-up.

Particularly suitable for IT environments and technological applications, ACCURATE AT is available standard with 50Hz and 60Hz power supply (400V/3N/50Hz, 230V/3/60Hz, 380V/3/60Hz, 460V/3/60Hz).

STANDARD UNIT COMPOSITION

- Unit for indoor or outdoor installation
- Maximum resistance to rust thanks to galvanized sheet metal structures and panels with powder-coated paint finish. The panels are lined with sound-insulating material.
- The reliability of all the components is guaranteed by partners who are world leaders in their sector.
- NEW EC fans with electronic commutation in order to maximize the energy savings and reduce the noise emissions.
- Standard G4 filtering section, F5-F8 optional, under CEN-EN 779 rule with 90,1% degrees of separation ASHRAE. The filter is the self-extinguishing type.
- The microprocessor controls all the main functions of the air conditioners; it also controls the operating alarms with the possibility of interfacing to supervisor and remote servicing systems.
- Electrical box under IEC 204-1/EN60204-1 rules.

Model			20	26	29	39	30	40	50	60	70	80	90
Frame			F3			F4				F5		F6	
No. Circuits/ No. Compressors			1/1	1/1	1/1	1/1	2/2	2/2	2/2	2/2	2/2	2/2	2/2
Refrigerant			R410A			R410A				R410A		R410A	
Nominal air flow		mc/h	6000	7500	8000	13000	10000	13000	13500	18000	19000	24000	25000
Power supply		V/Ph/Hz	400/3N/50			400/3N/50				400/3N/50		400/3N/50	
BASIC CONFIGURATION													
DX PERFORMANCE													
Total cooling capacity	(1)	kW	24,9	30,6	32,3	47,3	38,1	50,0	54,5	70,3	76,7	91,8	102,0
Sensible cooling capacity	(1)	kW	22,8	28,3	30,0	46,9	36,7	47,9	50,7	66,8	71,1	88,2	92,2
SHR	(1)		0,92	0,92	0,93	0,99	0,96	0,96	0,93	0,95	0,93	0,96	0,90
Compressors absorbed power		kW	4,4	5,4	6,1	8,0	6,4	8,6	10,6	12,3	13,3	16,0	19,3
EC radial fans power abs.		kW	1,35	1,80	1,80	3,20	1,30	3,19	3,10	4,50	4,50	6,10	6,10
HP EC radial fans power abs.		kW	0,89	1,69	1,69	3,50	2,09	3,49	3,50	5,10	5,10	6,80	6,80
CW PERFORMANCE													
Total cooling capacity	(2)	kW	23,8	28,1	29,5	50,0	41,0	50,0	51,4	65,0	67,6	91,0	91,0
Sensible cooling capacity	(2)	kW	21,8	26,4	27,6	46,3	37,0	46,3	47,5	62,2	64,5	85,0	85,0
SHR			0,92	0,94	0,94	0,93	0,90	0,93	0,92	0,96	0,95	0,93	0,93
Pressure drop		kPa	26	35	48	46	31	45	61	37	42	47	47
SMART CONFIGURATION													
DX PERFORMANCE													
Total cooling capacity	(3)	kW	27,3	33,3	36,5	48,1	41,3	52,7	61,2	75,6	86,1	104,9	114,7
Sensible cooling capacity	(3)	kW	27,3	33,3	36,5	48,1	41,3	52,7	61,2	75,6	86,1	104,3	114,2
SHR	(3)		1,00	1,00	1,00	1,00	1,00	1,00	1,00	1,00	1,00	0,99	1,00
Compressors absorbed power		kW	4,9	5,9	7,4	7,5	6,9	9,8	11,9	15,0	14,7	17,6	21,0
EC radial fans power abs.		kW	1,35	1,80	1,80	3,20	1,30	3,19	3,10	4,50	4,50	6,10	6,10
HP EC radial fans power abs.		kW	0,89	1,69	1,69	3,50	2,09	3,49	3,50	5,10	5,10	6,80	6,80
CW PERFORMANCE													
Total cooling capacity	(4)	kW	37,2	44,6	47,0	79,8	64,4	79,8	82,3	106,7	111,4	146,4	146,4
Sensible cooling capacity	(4)	kW	37,2	44,6	47,0	79,8	64,4	79,8	82,3	106,7	111,4	146,4	146,4
SHR			1,00	1,00	1,00	1,00	1,00	1,00	1,00	1,00	1,00	1,00	1,00
Pressure drop		kPa	49	69	77	65	62	65	69	52	57	57	57
VENTILATION													
No. EC radial fans			1	1	1	2	2	2	2	3	3	3	3
No. HP EC radial fans			1	1	1	2	2	2	2	3	3	3	3
Sound pressure level	(5)	dB(A)	56	60	60	64	59	64	64	67	67	67	67
HUMIDIFIER													
Capacity		kg/h	5	5	5	5	5	5	5	8	8	8	8
ELECTRICAL HEATERS													
Steps			3	3	3	3	3	3	3	3	3	3	3
Heating capacity		kW	9	9	9	15	15	15	15	18	18	18	18
DIMENSIONS													
Length		mm	1000	1000	1000	1550	1550	1550	1550	2100	2100	2650	2650
Depth		mm	790	790	790	790	790	790	790	790	790	790	790
Height		mm	1980	1980	1980	1980	1980	1980	1980	1980	1980	1980	1980

NOTES

1) Air IN 24°C/50%, cond. water temperature 30-35°C - ESP 20Pa
2) Air IN 24°C/50% , water temperature 7-12°C- ESP 20Pa
3) Air IN 35°C/30%, cond. temp. 30-35°C - ESP 20Pa
4) Air IN 35°C/30%, water temperature 12-18°C- ESP 20Pa
5) Measured at 1,5m height in front of the unit in free field

The units highlighted in this publication contain HFC R410A [GWP_{100} 1975] fluorinated greenhouse gases.

OPTIONS/ACCESSORIES

- Remote user terminal
- Electric heating coil
- Water heating coil
- Humidifier
- HP EC radial fans (High Pressure)
- Vibration isolation frame with rubber mountings
- Air distribution plenum
- Soundproof plenum
- Interface electronic board