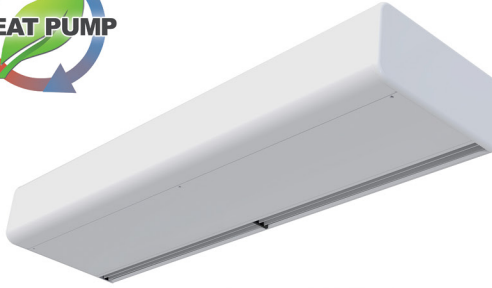


SMART DX-TO | Heat Pump Energy Saving Air Curtains For TOSHIBA Outdoor Units (1:1)



Characteristics



- Energy saving heat pump air curtains: Up to 70% reduction in costs and CO₂ emissions (heating mode).
- Stylish, discreet and contemporary design adaptive to any interior architecture.
- Smooth front panel can be customized with logotypes, lighting, lettering or safety and informative signals, according to the client requirements.
- Self-supporting steel rounded casing with edgeless plastic side covers, finished in structural epoxy-polyester painting white colour RAL9016 as standard. Other colours are available on request.
- Hidden top air entrance, avoiding the inside view of the unit and the inlet grille.
- Anodized aluminium outlet vanes, airfoil shaped, adjustable from 0 to 15° each side.
- EC Double-inlet centrifugal fans driven by an external rotor motor and low noise level, with very low consumption efficiency fans.
- Includes direct expansion coil with sensors. Optional condensate water pump.
- CS-5DX-NE Plug&Play control with 5 speeds and telephone cable 7m included.
- Requires TOSHIBA DX Interface KIT adapted for air curtain and programmable control, please consult.
- Ready to connect to TOSHIBA Inverter outdoor heat pump unit (R410A / R32) with expansion valve, not included, the customer should purchase it.

Specifications

Model	Airflow m ³ /h	Outdoor Unit (*) 230Vx1	Outdoor Unit (*) 400Vx3	Power Fan 230V-50Hz kW	Current Fan 230V-50Hz A	Noise Level (5 m) dB(A)	Weight kg
SMART ECM 1500 DX11-TO	2460	RAV-SM1104ATP-E	RAV-SP1104AT8-E	0,213	1,86	55	58
SMART ECM 2000 DX16-TO	3280	RAV-SM1603AT-E	RAV-SP1604AT8-E	0,284	2,48	56	73
SMART ECM 2000 DX19-TO	3280	-	RAV-SM2244AT8-E	0,284	2,48	56	73
SMART ECM 2500 DX21-TO	4100	-	RAV-SM2244AT8-E	0,355	3,10	57	79
SMART ECM 2500 DX24-TO	4100	-	RAV-SM2804AT8-E	0,355	3,10	57	79
SMART ECM 3000 DX26-TO	4920	-	RAV-SM2804AT8-E	0,426	3,72	58	91
SMART ECG 1000 DX10-TO	2190	RAV-SM1104ATP-E	RAV-SP1104AT8-E	0,213	1,86	59	44
SMART ECG 1500 DX13-TO	2920	RAV SM1404ATP-E	RAV SP1404AT8-E	0,284	2,48	60	64
SMART ECG 1500 DX15-TO	2920	RAV-SM1603AT-E	RAV-SP1604AT8-E	0,284	2,48	60	64
SMART ECG 2000 DX22-TO	4380	-	RAV-SM2244AT8-E	0,426	3,72	61	83
SMART ECG 2000 DX24-TO	4380	-	RAV-SM2804AT8-E	0,426	3,72	61	83
SMART ECG 2500 DX22-TO	5110	-	RAV-SM2244AT8-E	0,497	4,34	62	87
SMART ECG 2500 DX27-TO	5110	-	RAV-SM2804AT8-E	0,497	4,34	62	87
SMART ECG 3000 DX27-TO	5840	-	RAV-SM2804AT8-E	0,568	5,96	63	99V

(*) Includes direct expansion valve.

TOSHIBA Inverter Outdoor Units	Heating Capacity kW	Heating Power kW	SCOP or COP	Cooling Capacity kW	Cooling Power kW	SEER or EER	Power Supply	Pipes Gas Liquid inch	Pipes Minimum Length m	Pipes Maximum Length m	Pipes Maximum Height m
R410A (*)											
RAV-SM1104ATP-E	11,2	2,93	3,54	10,0	3,11	5,58	230Vx1	5/8 3/8	5	50	30
RAV-SP1104AT8-E	11,2	2,42	4,28	10,0	2,37	6,57	400Vx3	5/8 3/8	3	75	30
RAV SM1404ATP-E	14,0	3,80	3,68	12,0	3,74	3,21	230Vx1	5/8 3/8	5	50	30
RAV SP1404AT8-E	14,0	3,42	4,09	12,5	3,46	3,61	400Vx3	5/8 3/8	3	75	30
RAV-SM1603AT-E	16,0	4,43	3,61	14,0	4,49	3,12	230Vx1	5/8 3/8	5	50	30
RAV-SP1604AT8-E	16,0	4,30	3,72	14,0	4,49	3,12	400Vx3	5/8 3/8	3	75	30
RAV-SM2244AT8-E	22,4	6,49	3,45	20,0	7,20	2,78	400Vx3	1"1/8 1/2"	7,5	70	30
RAV-SM2804AT8-E	27,0	8,15	3,31	23,0	8,75	2,63	400Vx3	1"1/8 1/2"	7,5	70	30

Energy efficiency: SCOP/SEER seasonal ≤12kW, COP/EER >12kW.

Outdoor unit capacities depending on standard conditions: heating 20°CDB indoor / 7°CDB and 6°CWB outdoor, cooling 27°CDB and 19°CWB indoor / 35°CDB outdoor.

When adverse weather conditions, the outdoor unit capacity can decrease. It is recommendable to oversize the units.

(*) Also compatible with outdoor units with R32 gas: RAV-GM1101ATJP-E, RAV-GM1101AT8JP-E, RAV-GM1401ATJP-E, RAV-GM1401AT8JP-E

SMART VRF-TO | Heat Pump Energy Saving Air Curtains For TOSHIBA Outdoor Units (VRF)



Characteristics



- Energy saving heat pump air curtains: Up to 70% reduction in costs and CO₂ emissions (heating mode).
- Stylish, discreet and contemporary design adaptive to any interior architecture.
- Smooth front panel can be customized with logotypes, lighting, lettering or safety and informative signals, according to the client requirements.
- Self-supporting steel rounded casing with edgeless plastic side covers, finished in structural epoxy-polyester painting white colour RAL9016 as standard. Other colours are available on request.
- Hidden top air entrance, avoiding the inside view of the unit and the inlet grille.
- Anodized aluminium outlet vanes, airfoil shaped, adjustable from 0 to 15° each side.
- EC Double-inlet centrifugal fans driven by an external rotor motor and low noise level, with very low consumption efficiency fans.
- Includes direct expansion coil with sensors. Optional condensate water pump.
- CS-5DX-NE Plug&Play control with 5 speeds and telephone cable 7m included.
- Requires TOSHIBA VRF Interface KIT adapted for air curtain, programmable control and expansion valve, please consult.
- Ready to connect to TOSHIBA VRF outdoor heat pump unit (R410A), not included, the customer should purchase it.

Specifications

Model	Airflow m ³ /h	Toshiba Direct Expansion Valve	Power Fan 230V-50Hz kW	Current Fan 230V-50Hz A	Noise Level (5 m) dB(A)	Weight kg
SMART ECM 1500 VRF12-TO	2460	MMDXV140	0,213	1,86	55	58
SMART ECM 2000 VRF16-TO	3280	MMDXV140	0,284	2,48	56	73
SMART ECM 2000 VRF19-TO	3280	MMDXV280	0,284	2,48	56	73
SMART ECM 2500 VRF21-TO	4100	MMDXV280	0,355	3,10	57	79
SMART ECM 2500 VRF24-TO	4100	MMDXV280	0,355	3,10	57	79
SMART ECM 3000 VRF26-TO	4920	MMDXV280	0,426	3,72	58	91
SMART ECG 1000 VRF10-TO	2190	MMDXV140	0,213	1,86	59	44
SMART ECG 1500 VRF13-TO	2920	MMDXV140	0,284	2,48	60	64
SMART ECG 1500 VRF15-TO	2920	MMDXV140	0,284	2,48	60	64
SMART ECG 2000 VRF20-TO	4380	MMDXV280	0,426	3,72	61	83
SMART ECG 2000 VRF24-TO	4380	MMDXV280	0,426	3,72	61	83
SMART ECG 2500 VRF25-TO	5110	MMDXV280	0,497	4,34	62	87
SMART ECG 2500 VRF29-TO	5110	MMDXV280	0,497	4,34	62	87
SMART ECG 3000 VRF29-TO	5840	MMDXV280	0,568	5,96	63	99

TOSHIBA VRF Outdoor Units

Mini, Mini SMMSe, SMMSe (Heat Pump)

SHRMe (Heat Recovery)

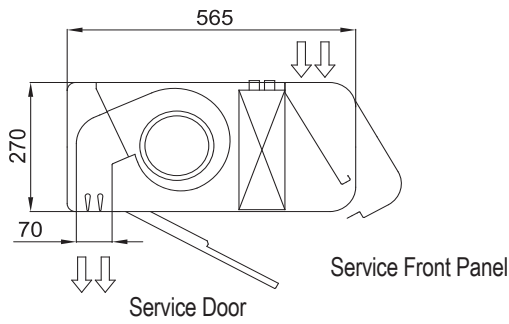
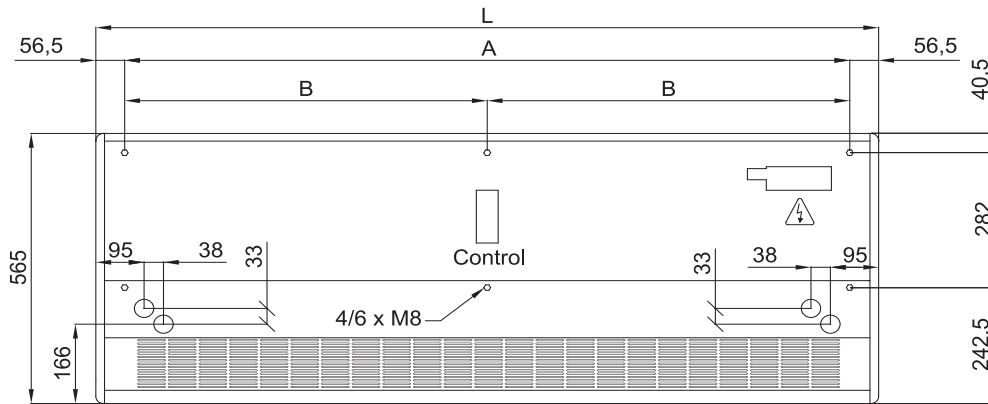


When adverse weather conditions, the outdoor unit capacity can decrease. It is recommendable to oversize the units.

SMART DX/VRF-TO | Heat Pump Energy Saving Air Curtains For TOSHIBA Outdoor Units (1:1/VRF)



Dimensions



	L	A	B
SMART 1000	1034	920	-
SMART 1500	1534	1420	710
SMART 2000	2034	1920	960
SMART 2500	2534	2420	1210
SMART 3000	3034	2920	1460

Finishes and Details

