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



## Characteristics



- Energy saving heat pump air curtains: Up to 70% reduction in costs and CO<sub>2</sub> emissions (heating mode).
- Specially designed to be installed in all type of revolving doors. Two possible layouts, tailored dimensions: standard (on top mounting) or inverted (false ceiling
- Self-supporting casing construction made of galvanized steel plate, finished in structural epoxy-polyester painting white colour RAL9016 as standard. Other colours or stainless steel are available on request.
- Large perforated inlet grille avoiding intensive maintenance.
- Circular anodized aluminium outlet vanes, airfoil shaped.
- 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 (R32) with expansion valve, not included, the customer should purchase it.

## **Specifications**

Model	Airflow	Outdoor Unit (*)	Outdoor Unit (*)	Power Fan 230V-50Hz	Current Fan 230V-50Hz	Noise Level (5 m)	Weight
	m³/h	230Vx1	400Vx3	kW	А	dB(A)	kg
ROTO ECG 1000 DX10-TO	2190	RAV-GM1101ATJP-E	RAV-GM1101AT8JP-E	0,213	1,86	61	-
ROTO ECG 1500 DX13-TO	2920	RAV-GM1401ATJP-E	RAV-GM1401AT8JP-E	0,284	2,48	62	-
ROTO ECG 1500 DX15-TO	2920	RAV-GM1601ATP-E	RAV-GM1601AT8JP-E	0,284	2,48	62	-
ROTO ECG 2000 DX22-TO	4380	-	RAV-GM2201AT8-E	0,426	3,72	63	-
ROTO ECG 2000 DX24-TO	4380	-	RAV-GM2801AT8-E	0,426	3,72	63	-
ROTO ECG 2500 DX22-TO	5110	-	RAV-GM2201AT8-E	0,497	4,34	64	-
ROTO ECG 2500 DX27-TO	5110	-	RAV-GM2801AT8-E	0,497	4,34	64	-

<sup>(\*)</sup> Includes direct expansion valve.

TOSHIBA Inverter Outdoor Units	Heating Capacity	Heating Power	SCOP or COP	Cooling Capacity	Cooling Power	SEER or EER	Power Supply	Pip Gas L		Pipes Minimum Length	Pipes Maximum Length	Pipes Maximum Height
R32	kW	kW		kW	kW			inc	ch	m	m	m
RAV-GM1101ATJP-E	11,2	2,99	4,19	9,5	2,99	5,28	230Vx1	5/8"	3/8"	5	50	30
RAV-GM1101AT8JP-E	11,2	2,99	4,19	9,5	2,99	5,28	400Vx3	5/8"	3/8"	5	50	30
RAV-GM1401ATP-E	13,0	3,60	3,61	12,1	4,42	2,74	230Vx1	5/8"	3/8"	5	50	30
RAV-GM1401AT8JP-E	13,0	3,60	3,61	12,1	4,42	2,74	400Vx3	5/8"	3/8"	5	50	30
RAV-GM1601ATP-E	16,0	4,57	3,50	14,0	4,49	3,12	230Vx1	5/8"	3/8"	5	50	30
RAV-GM1601AT8JP-E	16,0	4,57	3,50	14,0	4,49	3,12	400Vx3	5/8"	3/8"	5	50	30
RAV-GM2201AT8-E	22,4	5,71	3,92	19,0	5,86	3,24	400Vx3	1"1/8	1/2"	5	60	30
RAV-GM2801AT8-E	27,0	7,52	3,59	22,5	7,98	2,82	400Vx3	1"1/8	1/2"	5	60	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.

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



## Characteristics



- Energy saving heat pump air curtains: Up to 70% reduction in costs and CO<sub>2</sub> emissions (heating mode).
- Specially designed to be installed in all type of revolving doors. Two possible layouts, tailored dimensions: standard (on top mounting) or inverted (false ceiling
- Self-supporting casing construction made of galvanized steel plate, finished in structural epoxy-polyester painting white colour RAL9016 as standard. Other colours or stainless steel are available on request.
- Large perforated inlet grille avoiding intensive maintenance.
- · Circular anodized aluminium outlet vanes, airfoil shaped.
- 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	Toshiba Direct Expansion Valve	Power Fan 230V-50Hz	Current Fan 230V-50Hz	Noise Level (5 m)	Weight
	m³/h		kW	А	dB(A)	kg
ROTO ECG 1000 VRF10-TO	2190	MMDXV140	0,213	1,86	61	-
ROTO ECG 1500 VRF13-TO	2920	MMDXV140	0,284	2,48	62	-
ROTO ECG 1500 VRF15-TO	2920	MMDXV140	0,284	2,48	62	-
ROTO ECG 2000 VRF20-TO	4380	MMDXV280	0,426	3,72	63	-
ROTO ECG 2000 VRF24-TO	4380	MMDXV280	0,426	3,72	63	-
ROTO ECG 2500 VRF25-TO	5110	MMDXV280	0,497	4,34	64	-
ROTO ECG 2500 VRF29-TO	5110	MMDXV280	0,497	4,34	64	-

## 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.

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

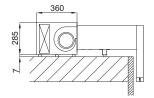


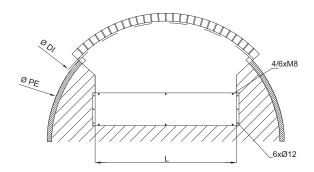
## Layouts and dimensions

Rotowind air curtains are tailor-made for any kind of revolving door according to the following layouts:

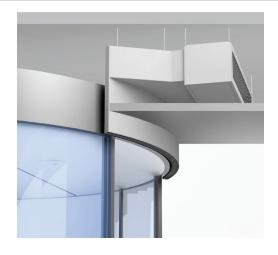
Standard: On top mounting

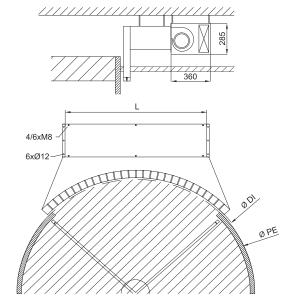






Inverted: False ceiling mounting





Fixation system

Optional decorative front cover



Fixed onto the door



Hanging from the ceiling



RAL 9016 (standard), optional:

- Colour from RAL palette
- Stainless steel AISI 304