HFC W GLYCOL CO2 READY R744

HEATCRAFT Worldwide Refrigeration

Dual-discharge unit cooler

EUROVENT CERTIFIED PERFORMANCE www.eurovent-certification.com

TA commercial range

- The 40 models in the TA range meet the requirements of laboratories, cutting and work areas, air locks, etc...
- Exceptionally low noise levels with the 6 or 8-pole models.
- The low air flow speed guarantees comfort as well as accurate control of both temperature and hygrometry.
- Optimised air throw up to 12 m.
- Sturdy and corrosion-resistant unit, coils totally anti-corrosion treated as standard, ABS casing and stainless steel screws.
- An intermediate drain pan avoids condensation on the casing.

E Solutions Efficiency • Environment

Reduced sound
Natural fluids:
Glycol water
*CO_2 (R744)**

ABS 7

* Operating pressure 60 bar

2 ▁▂▃▅▆ 22 kW

FRIGA-BOHN

HK® REFRIGERATION

TA - Commercial dual-discharge unit cooler

Market segments

- *Bars - Restaurants - Corner shops - Mini-markets*
- *Hard Discount - Supermarkets - Hypermarkets*

Description

Casing

Aesthetics and accessibility

The recyclable ABS casing of the TA guarantees a high level of quality and finish.

Sturdiness

Highly resistant to thermal shocks.

Aesthetics

The TA unit blends easily into its surroundings thanks to the casing with integrated fan guard.

Hygiene

Rounded corners eliminate condensate retention zones which favour the development of harmful germ, use of protected steel sheets and stainless steel screws.
Internal drain pans to avoid condensation on the casing.

Safety

No sharp or cutting edges.

Ventilation

- The TA range is equipped with bell mounted electric fans Ø 350 mm.
- The motors are of the enclosed type, single-phase with a capacitor, 230 V, 50-60 Hz, IP 55, class F and internal overload protection.
- Available in the following versions: 4-pole = 1,500 rpm, 6-pole = 1,000 rpm or 8-pole = 750 rpm, depending upon the admissible noise level.
- The fan guards, incorporated into the casing, are compliant with safety standards.

Coil

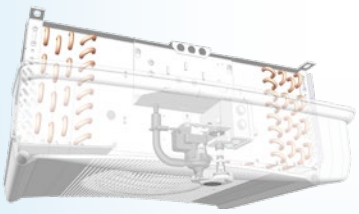
- The highly efficient and compact TA range finned coils are designed with corrugated aluminium fins (fin spacing 3.63 or 6.35 mm) and internally grooved copper tubes.
- The coils are supplied via a Venturi distributor.

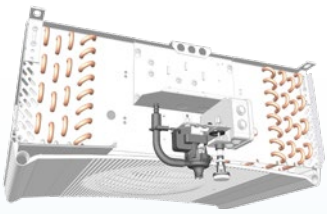
Advantages

Installation

Simple installation and commissioning with easy access to the expansion valve (see photo).

A condensation evacuation pump may be provided factory-mounted in the casing to help reduce installation time (option **PRK**).





Evacuation of condensation on left or right side.

Servicing / Maintenance

Hinged drain pan offering easy access to all components (see photo).

The electric heating elements fitted in slots under the coil considerably simplify maintenance tasks (see photo).

Designation

TA 5(1) **R**(2) **6P**(3)

(1) Model
(2) Fin spacing: **R** = 3.63 mm – **L** = 6.35 mm
(3) **4P** = 1,500 rpm, **6P** = 1,000 rpm or **8P** = 750 rpm

Certifications

Options

Kit	Factory	
		Coil
	BAE	Paint coil protection.
	BXT	Blygold Polual XT coil protection.
	WCO	Glycol water, coolant (please contact us for details).
	CO2	R744 optimization (please contact us for details).
		Defrost
	HGB	Hot gas coils.
E1K	E1U	Light electric defrost.
2TH		**TH 5709L**: end of defrost thermostat with single-pole, reversing switch at +12 °C (±3 °C) and delayed fan start up +2 °C (±3 °C). **THS 5708L**: single-pole thermostat for overheating protection set at +24 °C (±3 °C). Recommended with electric defrost.
		Fully equipped unit coolers
PRK		Condensate discharge pump.
	DMP	Expansion valve fitted.
	EEC	Fully equipped unit cooler: - Expansion valve fitted. - Solenoid valve fitted. - Piping pre-fitted with a ball valve (siphoning function provided by the collector).

TA ... R 4P - 1,500 rpm — 3,63 mm

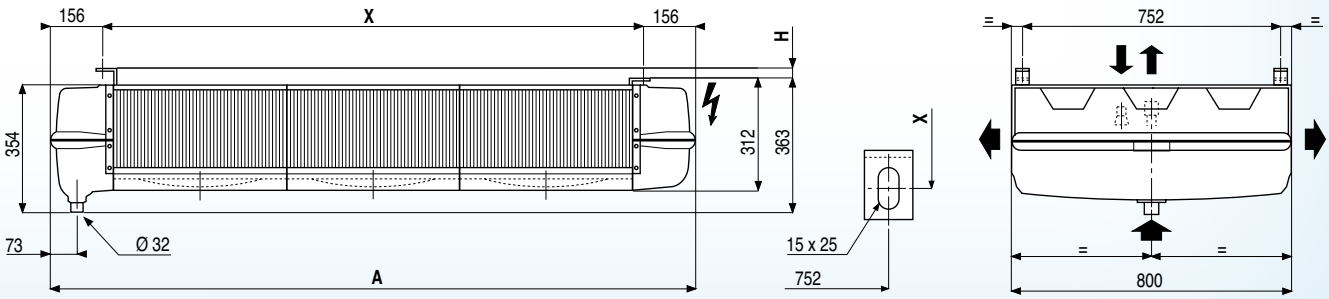
			TA ... R 4P	1	2	3	4	5	6	7
Capacity R404A (1)	DT1 = 10 K - SC 1	kW		5,20	7,97	9,87	10,78	14,97	18,34	21,86
	DT1 = 8 K - SC 2	kW		3,38	5,31	6,53	7,00	9,93	12,18	14,42
Capacity CO2 (7)	DT1 = 8 K - SC 2	kW		3,69	4,88	6,47	7,53	9,61	11,36	13,26
Acoustic	Lp 4 m (2)	dB(A)		39	42	42	42	44	44	45
Surface		m^2		15,0	15,0	22,5	29,9	33,7	56,1	59,9
Circuit volume		dm^3		2,2	2,2	3,3	4,5	5,0	8,4	8,9
Fan Ø 350 mm 230 V/1/50-60 Hz		Nb		1	2	2	2	3	3	4
	Air flow	m^3/h		1920	4210	4010	3850	6020	5560	7700
	Air throw (3)	m		2 x 10	2 x 12	2 x 11	2 x 10	2 x 11	2 x 10	2 x 10
	230 V/1/50 Hz	W max		1 x 220	2 x 220	2 x 220	2 x 220	3 x 220	3 x 220	4 x 220
		A max		1 x 1,1	2 x 1,1	2 x 1,1	2 x 1,1	3 x 1,1	3 x 1,1	4 x 1,1
Electric defrost E1K (4)	230 V/1/50 Hz	W total		800	800	1200	1600	1800	3000	3200
		A total		3,5	3,5	5,2	7,0	7,8	13,0	14,0
	400 V/3/50 Hz	W total		-	-	-	-	-	3000	3200
		A total		-	-	-	-	-	6,5	6,9
Net weight		kg		23	25	28	33	36	45	55

TA ... L 4P - 1,500 rpm — 6,35 mm

			TA ... L 4P	1	2	3	4	5	6	7
Capacity R404A (1)	DT1 = 10 K - SC 1	kW		4,48	7,30	8,53	9,27	10,26	14,92	18,84
	DT1 = 8 K - SC 2	kW		2,92	4,89	5,66	6,08	6,75	10,01	12,45
Capacity CO2 (7)	DT1 = 8 K - SC 2	kW		3,46	5,07	6,16	6,98	7,64	9,97	12,16
Capacity W (8)	DT1 = 10 K (a)	kW		4,83	-	-	9,84	-	15,62	20,02
	DT1 = 8 K (b)	kW		3,14	-	-	6,50	-	10,53	13,20
Acoustic	Lp 4 m (2)	dB(A)		39	42	42	42	44	44	45
Surface		m^2		11,2	13,5	18,0	22,5	20,2	33,7	45,0
Circuit volume		dm^3		2,8	3,3	4,5	5,6	5,0	8,4	11,2
Fan Ø 350 mm 230 V/1/50-60 Hz		Nb		1	2	2	2	3	3	4
	Air flow	m^3/h		1980	4210	4070	3950	6320	5930	7900
	Air throw (3)	m		2 x 11	2 x 12	2 x 11	2 x 11	2 x 12	2 x 11	2 x 11
	230 V/1/50 Hz	W max		1 x 220	2 x 220	2 x 220	2 x 220	3 x 220	3 x 220	4 x 220
		A max		1 x 1,1	2 x 1,1	2 x 1,1	2 x 1,1	3 x 1,1	3 x 1,1	4 x 1,1
Electric defrost E1K (4)	230 V/1/50 Hz	W total		800	800	1200	1600	1800	3000	3200
		A total		3,5	3,5	5,2	7,0	7,8	13,0	14,0
	400 V/3/50 Hz	W total		-	-	-	-	-	3000	3200
		A total		-	-	-	-	-	6,5	6,9
Net weight		kg		21	27	30	32	35	44	58

			TA ... 4P	1	2	3	4	5	6	7
Dimensions	A	mm		872	1372	1372	1372	1872	1872	2372
	H	mm		17,5	17,5	17,5	17,5	35	35	35
	X	mm		560	1060	1060	1060	1560	1560	2060
Connections	Inlet	Ø (5)		D 5/8"	D 5/8"	D 5/8"	D 5/8"	D 5/8"	D 5/8"	D 5/8"
R404A	Outlet	Ø ODF (6)		5/8"	5/8"	7/8"	7/8"	7/8"	1"1/8	1"1/8

(1) Standard conditions (Eurovent) :
SC1 / +10°C (air inlet temp.) / 0 °C (evaporating temp.) / DT1 = 10K
SC2 / 0°C (air inlet temp.) / -8°C (evaporating temp.) / DT1 = 8K
(2) Average sound pressure level in dB(A) measured at 4 m, at fan height, in direct line of sight on a reflective surface, given for information only..
(3) Residual air speed: 0.25 m/s.
(4) Electric defrost option.
(5) Distributor: Male to be brazed.
(6) ODF: Female to receive a tube of the same diameter.
(7) Operating pressure 60 bar - Tube diameter to define the order.
(8) Glycol water:
(a) EG Percent. glycol = 30% - Fluid inlet temp. = -2°C – Fluid outlet temp. = +2°C Inlet dry temp. = +10°C - relative humidity = 85%
(b) EG Percent. glycol = 30% - Fluid inlet temp. = -8°C – Fluid outlet temp. = -4°C Inlet dry temp. = +2°C - relative humidity = 85%
Other conditions: please contact us.



BAE	BXT	WCO	CO2	PRK	HGB	E1K	E1U	2TH	DMP	EEC
O	O	+1	+1	O	O	O	O	O	O	O

TA ... R 6P - 1,000 rpm — 3,63 mm

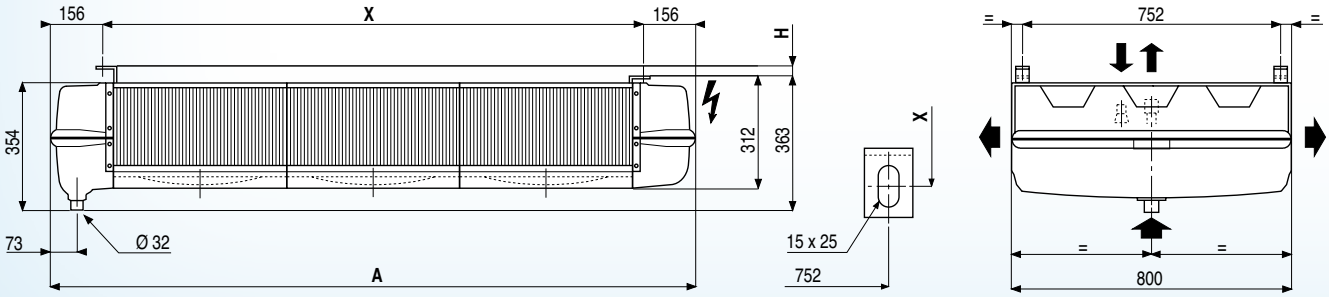
			TA ... R 6P	1	2	3	4	5	6	7
Capacity R404A (1)	DT1 = 10 K - SC 1	kW		3,93	6,09	7,46	8,06	11,26	13,21	16,32
	DT1 = 8 K - SC 2	kW		2,61	4,09	4,99	5,37	7,55	8,89	10,90
Capacity CO2 (7)	DT1 = 8 K - SC 2	kW		2,79	3,84	5,00	5,73	7,49	8,82	10,59
Acoustic	Lp 4 m (2)	dB(A)		29	32	32	32	34	34	35
Surface		m^2		15,0	15,0	22,5	29,9	33,7	56,1	59,9
Circuit volume		dm^3		2,2	2,2	3,3	4,5	5,0	8,4	8,9
Fan Ø 350 mm 230 V/1/50-60 Hz		Nb		1	2	2	2	3	3	4
	Air flow	m^3/h		1300	2840	2710	2600	4060	3760	5200
	Air throw (3)	m		2 x 7	2 x 7	2 x 7	2 x 7	2 x 7	2 x 6	2 x 7
	230 V/1/50 Hz	W max		1 x 120	2 x 120	2 x 120	2 x 120	3 x 120	3 x 120	4 x 120
		A max		1 x 0,6	2 x 0,6	2 x 0,6	2 x 0,6	3 x 0,6	3 x 0,6	4 x 0,6
Electric defrost E1K (4)	230 V/1/50 Hz	W total		800	800	1200	1600	1800	3000	3200
		A total		3,5	3,5	5,2	7,0	7,8	13,0	14,0
	400 V/3/50 Hz	W total		-	-	-	-	-	3000	3200
		A total		-	-	-	-	-	6,5	6,9
Net weight		kg		23	25	28	33	36	45	55

TA ... L 6P - 1,000 rpm — 6,35 mm

			TA ... L 6P	1	2	3	4	5	6	7
Capacity R404A (1)	DT1 = 10 K - SC 1	kW		3,43	5,55	6,47	7,01	8,02	10,98	14,18
	DT1 = 8 K - SC 2	kW		2,28	3,76	4,35	4,67	5,35	7,45	9,53
Capacity CO2 (7)	DT1 = 8 K - SC 2	kW		2,62	3,93	4,74	5,32	5,95	7,75	9,75
Capacity W (8)	DT1 = 10 K (a)	kW		3,30	-	-	8,09	-	12,48	16,40
	DT1 = 8 K (b)	kW		2,60	-	-	5,30	-	8,36	10,76
Acoustic	Lp 4 m (2)	dB(A)		29	32	32	32	34	34	35
Surface		m^2		11,2	13,5	18,8	22,5	20,2	33,7	45,0
Circuit volume		dm^3		2,8	3,3	4,5	5,6	5,0	8,4	11,2
Fan Ø 350 mm 230 V/1/50-60 Hz		Nb		1	2	2	2	3	3	4
	Air flow	m^3/h		1340	2840	2750	2670	4250	4000	5340
	Air throw (3)	m		2 x 7	2 x 7	2 x 7	2 x 7	2 x 7	2 x 7	2 x 7
	230 V/1/50 Hz	W max		1 x 120	2 x 120	2 x 120	2 x 120	3 x 120	3 x 120	4 x 120
		A max		1 x 0,6	2 x 0,6	2 x 0,6	2 x 0,6	3 x 0,6	3 x 0,6	4 x 0,6
Electric defrost E1K (4)	230 V/1/50 Hz	W total		800	800	1200	1600	1800	3000	3200
		A total		3,5	3,5	5,2	7,0	7,8	13,0	14,0
	400 V/3/50 Hz	W total		-	-	-	-	-	3000	3200
		A total		-	-	-	-	-	6,5	6,9
Net weight		kg		21	27	30	32	35	44	58

			TA ... 6P	1	2	3	4	5	6	7
Dimensions	A	mm		872	1372	1372	1372	1872	1872	2372
	H	mm		17,5	17,5	17,5	17,5	35	35	35
	X	mm		560	1060	1060	1060	1560	1560	2060
Connections	Inlet	Ø (5)		D 5/8"	D 5/8"	D 5/8"	D 5/8"	D 5/8"	D 5/8"	D 5/8"
R404A	Outlet	Ø ODF (6)		5/8"	5/8"	7/8"	7/8"	7/8"	1"1/8	1"1/8

(1) Standard conditions (Eurovent) :
SC1 / +10°C (air inlet temp.) / 0 °C (evaporating temp.) / DT1 = 10K
SC2 / 0°C (air inlet temp.) / -8°C (evaporating temp.) / DT1 = 8K
(2) Average sound pressure level in dB(A) measured at 4 m, at fan height, in direct line of sight on a reflective surface, given for information only..
(3) Residual air speed: 0.25 m/s.
(4) Electric defrost option.
(5) Distributor: 5/8" to be brazed.
(6) ODF: Female to receive a tube of the same diameter.
(7) Operating pressure 60 bar - Tube diameter to define the order.
(8) Glycol water:
(a) EG Percent. glycol = 30% - Fluid inlet temp. = -2°C – Fluid outlet temp. = +2°C
Inlet dry temp. = +10°C - relative humidity = 85%
(b) EG Percent. glycol = 30% - Fluid inlet temp. = -8°C – Fluid outlet temp. = -4°C
Inlet dry temp. = +2°C - relative humidity = 85%
Other conditions: please contact us.



BAE	BXT	WCO	CO2	PRK	HGB	E1K	E1U	2TH	DMP	EEC
O	O			O	O	O	O	O	O	O

TA ... R 8P - 750 rpm — 3,63 mm

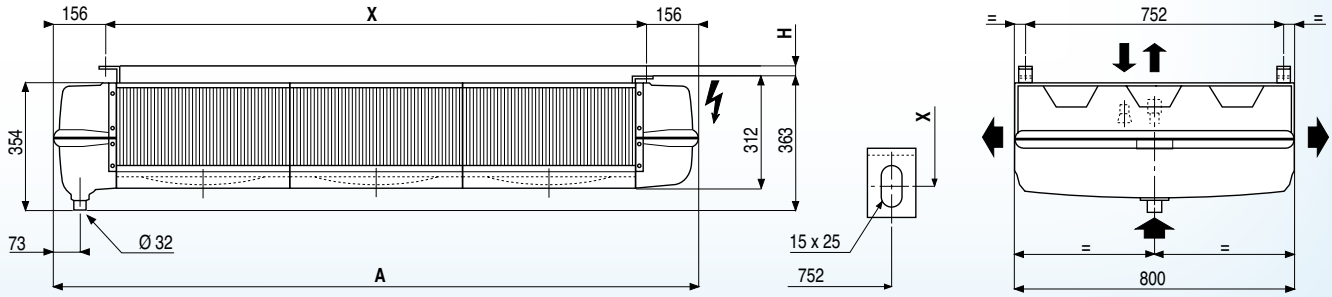
			TA ... R 8P	1	2	3	4	5	6	7
Capacity R404A (1)	DT1 = 10 K - SC 1	kW		3,29	5,08	6,21	6,70	9,35	10,69	13,49
	DT1 = 8 K - SC 2	kW		2,20	3,42	4,18	4,50	6,32	7,33	9,13
Capacity CO2 (7)	DT1 = 8 K - SC 2	kW		2,25	3,19	4,11	4,66	6,20	7,22	8,83
Acoustic	Lp 4 m (2)	dB(A)		22	25	25	25	27	27	28
Surface		m^2		15,0	15,0	22,5	29,9	33,7	56,1	59,9
Circuit volume		dm^3		2,2	2,2	3,3	4,5	5,0	8,4	8,9
Fan Ø 350 mm 230 V/1/50-60 Hz		Nb		1	2	2	2	3	3	4
	Air flow	m^3/h		980	2140	2050	1970	3080	2850	3940
	Air throw (3)	m		2 x 5	2 x 6	2 x 5	2 x 5	2 x 5	2 x 5	2 x 5
	230 V/1/50 Hz	W max		1 x 90	2 x 90	2 x 90	2 x 90	3 x 90	3 x 90	4 x 90
		A max		1 x 0,4	2 x 0,4	2 x 0,4	2 x 0,4	3 x 0,4	3 x 0,4	4 x 0,4
Electric defrost E1K (4)	230 V/1/50 Hz	W total		800	800	1200	1600	1800	3000	3200
		A total		3,5	3,5	5,2	7,0	7,8	13,0	14,0
	400 V/3/50 Hz	W total		-	-	-	-	-	3000	3200
		A total		-	-	-	-	-	6,5	6,9
Net weight		kg		23	24	28	33	36	45	55

TA ... L 8P - 750 rpm — 6,35 mm

			TA ... L 8P	1	-	3	4	5	6	7
Capacity R404A (1)	DT1 = 10 K - SC 1	kW		2,88	-	5,40	5,86	6,79	-	11,84
	DT1 = 8 K - SC 2	kW		1,93	-	3,66	3,96	4,55	-	8,00
Capacity CO2 (7)	DT1 = 8 K - SC 2	kW		2,12	-	3,88	4,32	4,92	-	8,17
Capacity W (8)	DT1 = 10 K (a)	kW		3,34	-	-	6,77	-	8,51	13,66
	DT1 = 8 K (b)	kW		2,20	-	-	4,50	-	7,27	9,06
Acoustic	Lp 4 m (2)	dB(A)		22	-	25	25	27	27	28
Surface		m^2		11,2	-	18,0	22,5	20,2	33,7	45,0
Circuit volume		dm^3		2,8	-	4,5	5,6	5,0	8,4	11,2
Fan Ø 350 mm 230 V/1/50-60 Hz		Nb		1	-	2	2	3	3	4
	Air flow	m^3/h		1010	-	2080	2020	3210	2890	4040
	Air throw (3)	m		2 x 5	-	2 x 5	2 x 5	2 x 6	2 x 5	2 x 5
	230 V/1/50 Hz	W max		1 x 90	-	2 x 90	2 x 90	3 x 90	3 x 90	4 x 90
		A max		1 x 0,4	-	2 x 0,4	2 x 0,4	3 x 0,4	3 x 0,4	4 x 0,4
Electric defrost E1K (4)	230 V/1/50 Hz	W total		800	-	1200	1600	1800	3000	3200
		A total		3,5	-	5,2	7,0	7,8	13,0	14,0
	400 V/3/50 Hz	W total		-	-	-	-	-	3000	3200
		A total		-	-	-	-	-	6,5	6,9
Net weight		kg		21	-	30	32	35	44	58

			TA ... 8P	1	2	3	4	5	6	7
Dimensions	A	mm		872	1372	1372	1372	1872	1872	2372
	H	mm		17,5	17,5	17,5	17,5	35	35	35
	X	mm		560	1060	1060	1060	1560	1560	2060
Connections	Inlet	Ø (5)		D 5/8"	D 5/8"	D 5/8"	D 5/8"	D 5/8"	D 5/8"	D 5/8"
R404A	Outlet	Ø ODF (6)		5/8"	5/8"	7/8"	7/8"	7/8"	1"1/8	1"1/8

(1) Standard conditions (Eurovent) :
SC1 / +10°C (air inlet temp.) / 0 °C (evaporating temp.) / DT1 = 10K
SC2 / 0°C (air inlet temp.) / -8°C (evaporating temp.) / DT1 = 8K
(2) Average sound pressure level in dB(A) measured at 4 m, at fan height, in direct line of sight on a reflective surface, given for information only..
(3) Residual air speed: 0.25 m/s.
(4) Electric defrost option.
(5) Distributor: Male to be brazed.
(6) ODF: Female to receive a tube of the same diameter.
(7) Operating pressure 60 bar - Tube diameter to define the order.
(8) Glycol water:
(a) EG Percent. glycol = 30% - Fluid inlet temp. = -2°C – Fluid outlet temp. = +2°C Inlet dry temp. = +10°C - relative humidity = 85%
(b) EG Percent. glycol = 30% - Fluid inlet temp. = -8°C – Fluid outlet temp. = -4°C Inlet dry temp. = +2°C - relative humidity = 85%
Other conditions: please contact us.



BAE	BXT	WCO	CO2	PRK	HGB	E1K	E1U	2TH	DMP	EEC
O	O	+1	+1	O	O	O	O	O	O	O