




ECM HBR and HBS refrigeration motors

November 2020

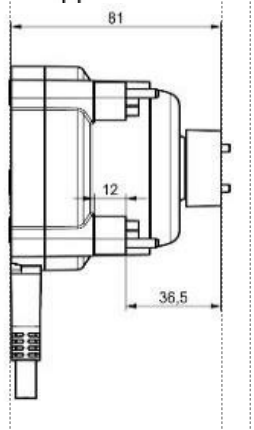
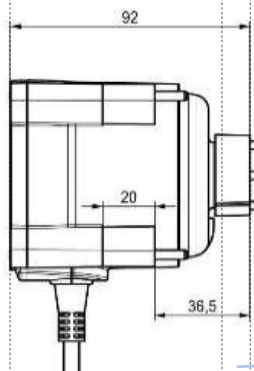




- TYPE ECM072
- SIZE 72 mm dia. (2.8 in.)
- POWER up to 30 W output
- VOLTAGE 115 V/ 230 V – 50/60 Hz
- WORKING TEMPERATURE - 30°C + 60°C
- EFFICIENCY 72% typical
- SPEED up to four
- REVERSIBILITY pre, post, timed reverse modes
- PROTECTION DEGREE IP65
- STANDARD CE, CCC, EAC, ATEX, RoHS
 us for HBS

12 W

ECM

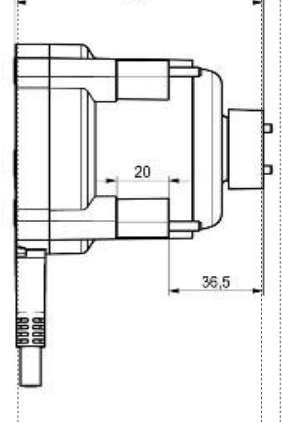
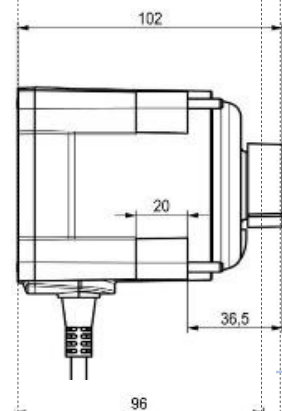


ECM C
ECM CP
ECM HC
ECM HBS
ECM HBR

Save
11 mm

20 W

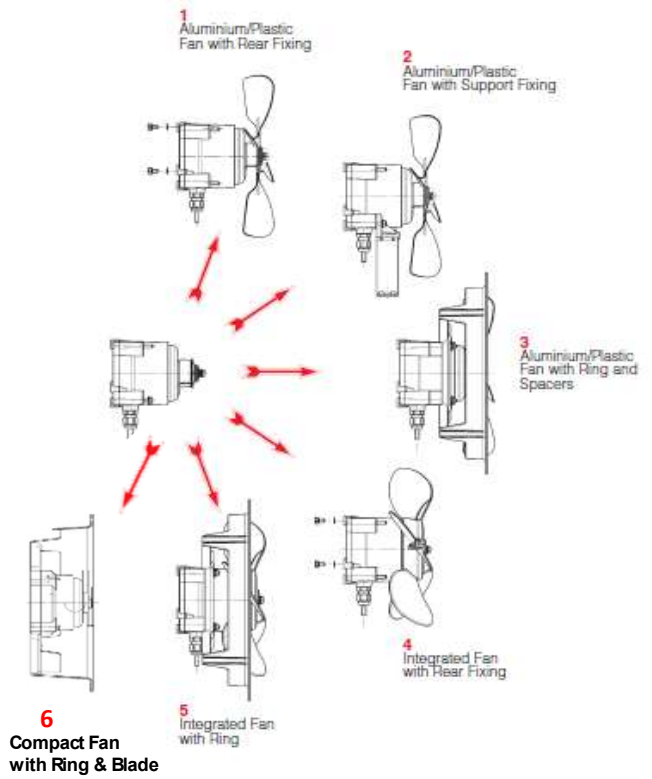
ECM



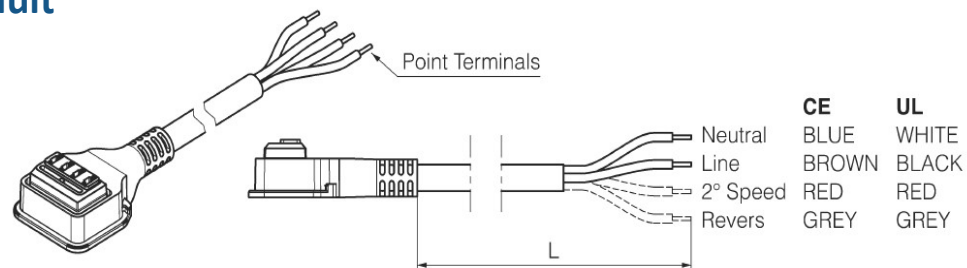
ECM C
ECM CP
ECM HC
ECM HBS
ECM HBR

Save
6 mm

Accessories 100% compatible with ECM, ECM-C, ECM-HC



Detached cable as default



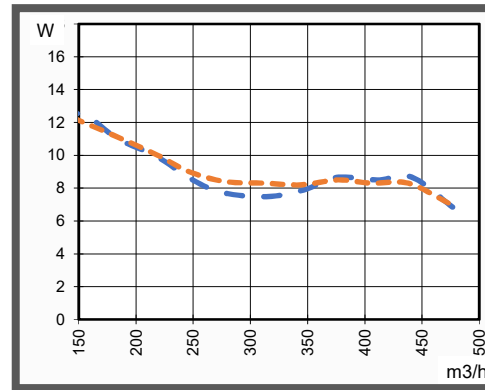
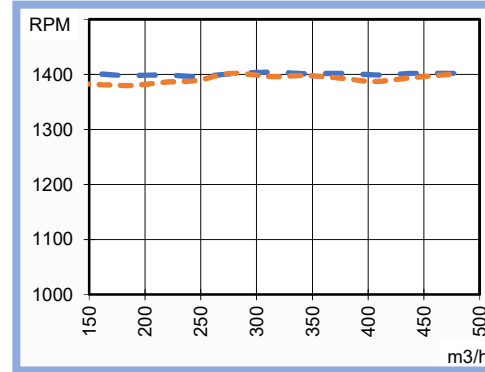
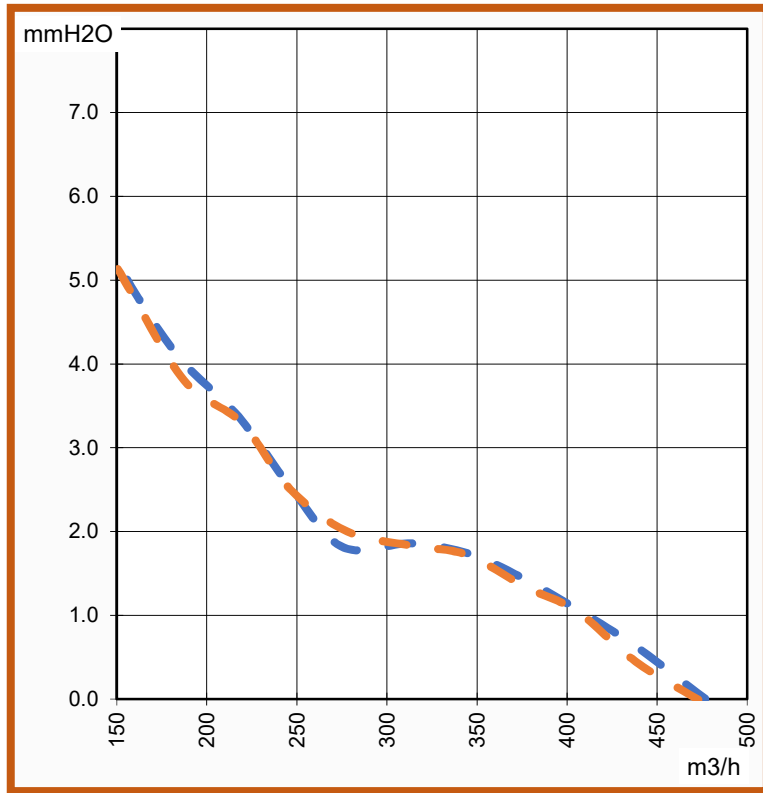
	Current range			In development	Obsolete motors		
	ECM HBR	ECM HBS	ECM HC VS	ECM FBS*	ECM	ECM C	ECM HC
Type	ECM motor						
Lamination Diameter	72mm - 28" 1/3						
Motor Width (smaller stack)	81mm - 3.2"				92mm - 3.6"	81mm - 3.2"	
Motor Width bigger stack	96mm - 3.8"				102mm - 4"	96mm - 3.8"	
Power output	12-30 W				12-20 W	12-30 W	
Voltage	115V or 230V			90 to 260 V (50/60 Hz)	115V or 230V		
Frequency	50/60 Hz						
Working temperature	-30°C +60°C (-22°F +140°F)						
# discrete speeds	Up to four		Variable (0-10 Vdc)	Up to four	One		Up to two
Reversibility	On demand			On demand	-	-	On demand
Programmable	-	-	-	NFC on demand	-	-	NFC on demand
Protection degree	IP65 / IP66*	IP65 / IP66*	IP65	IP65 / IP66	IP65 / IP66	IP65	IP65
Standard	CE, CCC, EAC	CE, UL , CCC, EAC	CE, UL, CCC, EAC	CE, UL, CCC, EAC	CE, UL, VDE, CCC, EAC	CE, VDE, CCC, EAC	CE, UL, VDE, CCC, EAC
	ATEX, ROHS	ATEX, ROHS	ATEX, ROHS	ATEX, ROHS	ATEX, ROHS	ATEX, ROHS	ATEX, ROHS

* under development

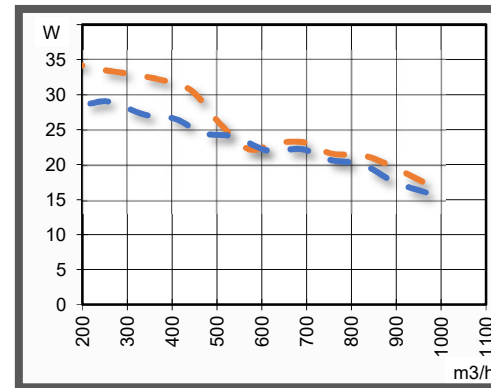
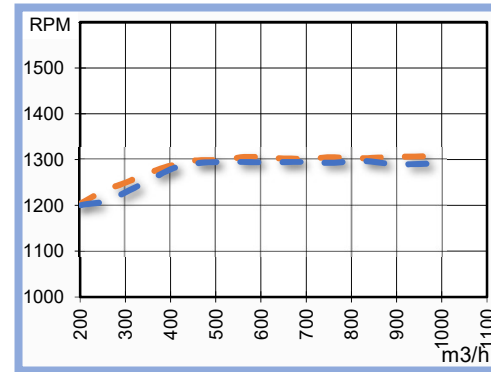
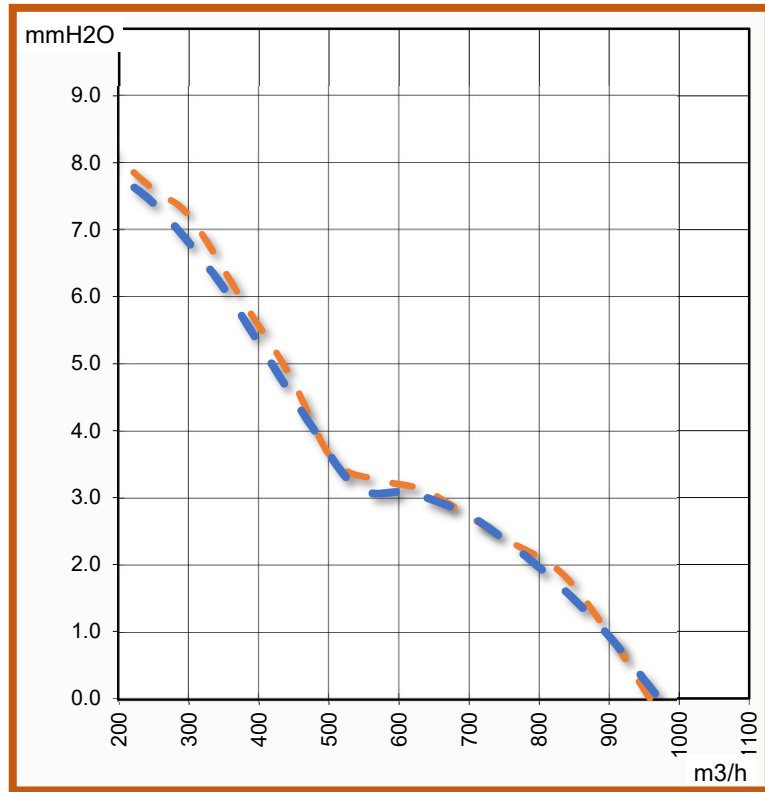
ECM HBR allows increased flexibility of use extending speed set up to 4 speed

		Matching motor-Fan / ECM HBR-HBS 115V/230V - Max speed					
		Ø Fan					
RPM	α	154 Motor	172 Motor	200 Motor	230 Motor	254 Motor	300 Motor
1300	19°	[Blue]					[Green]
	22°	[Blue]					[Green]
	25°	[Blue]					[Green]
	28°	[Blue]					[Green]
	30°	[Grey]	[Grey]	[Grey]	[Grey]	[Grey]	[Grey]
	31°	[Blue]	[Blue]	[Blue]	[Green]	[Green]	[Grey]
1400	19°	[Blue]					[Green]
	22°	[Blue]					[Green]
	25°	[Blue]					[Green]
	28°	[Blue]					[Green]
	30°	[Grey]	[Grey]	[Grey]	[Grey]	[Grey]	[Grey]
	31°	[Blue]	[Blue]	[Blue]	[Green]	[Green]	[Grey]
1600	19°	[Blue]					[Green]
	22°	[Blue]					[Green]
	25°	[Blue]					[Green]
	28°	[Blue]					[Green]
	30°	[Grey]	[Grey]	[Grey]	[Grey]	[Grey]	[Grey]
	31°	[Blue]	[Blue]	[Blue]	[Green]	[Green]	[Grey]
1800	19°	[Blue]					[Green]
	22°	[Blue]					[Green]
	25°	[Blue]					[Green]
	28°	[Blue]					[Green]
	30°	[Grey]	[Grey]	[Grey]	[Grey]	[Grey]	[Grey]
	31°	[Blue]	[Blue]	[Blue]	[Green]	[Green]	[Grey]
2100	19°	[Blue]					[Green]
	22°	[Blue]					[Green]
	25°	[Blue]					[Green]
	28°	[Blue]					[Green]
	30°	[Grey]	[Grey]	[Grey]	[Grey]	[Grey]	[Grey]
	31°	[Blue]	[Blue]	[Blue]	[Green]	[Green]	[Grey]

- [Blue] ECM HBR/HBS 12-10
 - [Yellow] ECM HBR 15-10 / HBS 20-25
 - [Green] ECM HBR/HBS 20-25
 - [Pink] ECM HBR/HBS 25-25
 - [Brown] ECM HBR/HBS 30-25
 - [Grey] not allowed
- * integrated fan only



— — ECM HBR/HBS 12-10
— — ECM 1/2H 12-15



--- ECM HBR/HBS 20-25
--- ECM 1/2H 20-25

Feature	Benefit for the customer
Compact size	Easy to install in small spaces
Detached cable	Easy to install, maintain and replace
Enhanced electronic protections (Thermal derating reduces speed if temperature exceeds safety values)	Preserves motor safety for overloads (e.g. wrong impellers or obstructed ducts)
High versatility of usage: <ul style="list-style-type: none">- 2/3/4 speeds- 2 speeds + reverse mode- pre reverse timed mode, post reverse time mode, periodic reverse	High customization level of functions to suit customer usage demands, allowing the highest versatility of use in the market

Simulating 90 000 h working life

- START-STOP TESTS Stressing motor over on-off duty cycles at -30°C and +60°
- ACCELERATED LIFE TEST IP protection chamber (dust and water), humidity, thermal shock chambers
- THERMAL MAPPING Granting PCBA and windings correct temperature in severe working condition
- LOCKED ROTOR TEST Motor tries multiple restart and stops working after safe try time
- WIND MILLING TESTS Granted correct starting and performance even over counter air flow
- STARTING AND REVERSE MODE TEST Verify correct control functioning, rotation and reverse modes at -30°C and +60°C
- EMC TESTS In accordance with EN 55014 and EN 61000 standards

REGAL

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