

RdS or Sample: 0114/11 Data: 21/09/2011 Ed.

1 GENERAL

1.1	Customer	NORDICOLD	Country	SVEZIA	Application	REFRIGERATION
1.2	Product type	ECM				
1.3	Customer's part number		Customer Model		Area Manager:	Mr. Albrici
1.4	Elco's part number	ECA12150VA0280	Elco Model	ECM 12-15		

2 MARKING

Voltage:	230	V	Frequency:	50-60	Hz	Ampere:	0,11	A	Win/Wout:	14/	W	rpm:	1400
CL:	B		IP:	66		ZP	☐		TP	☒			
C µF:	/												
Vi:	/												

3 ELECTRIC DATA

3.1	Voltage	230	V	Phase	1	Frequency:	50	Hz	rpm:	1400	
	Starting voltage:	150	V			Voltage range:	230± 6%				
3.2	No Load										
	Power Win :	2,6	W			Ampere:	0,037	A	rpm:	1470	
3.3	Load	Blade/Blower	☒	Yes	☐	No					
	Power Win/Wout:	9/4	W	Power Hp	0,0054	Ampere :	0,075	A	rpm (full load):	1455	
	Power factor	0,52	(@ 100% F.L.):			Efficiency	45	%	Efficiency max:	70 %	
	Capacitor µF:	/				N° of Speeds:	1				
	Vi:	/									

3.4	Insulation class:	B 130°C								
	Working ambient temperature range °C:	-40 + +55								
	Working ambient temperature range °F:	-40 + +131								
	Temp rise °C:	/								
3.5	Overload Protection:	Electronic				Protector °C:	/			
						Protector °F:	/			
3.6	Protection degree IP:	66	☐	Rotation CCW lead end	☒	Rotation CW lead end				
3.7	FLA full load amps:	0,075	A	CORRENTE A PIENO CARICO						
3.8	LRA locked rotor amps:	0,66	A	CORRENTE A ROTORE BLOCCATO						
3.9	FLT full load torque:	0,0265	Nm	oz-in:	3,75	COPPIA A PIENO CARICO				
3.10	BDT breakdown torque:	0,174	Nm	oz-in:	24,70	COPPIA MASSIMA				
3.11	LRT locked rotor torque:	0,174	Nm	oz-in:	24,70	COPPIA A ROTORE BLOCCATO				
3.12	Duty Cycle:	☒	Continuos	☒	Intermittent					

4 MECHANICAL DATA

4.1 Enclosure:	☐ Sheet steel ☐ Endbells ☐ Covers ☒ Covers ☐ Open ☐ Open Drip proof - DP - ☒ TEAO ☐ TENV ☐ TEFC ☐ Explosion proof	1,5mm (0,06 in) thickness, cilindrical shape welded, black painted cast aluminium alloy cast aluminium alloy plastic body totally enclosed air over totally enclosed non ventilated totally enclosed fan cooled Class:
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4.2 Mounting:

☒ Horizontal
☐ Brackets
☒ Ring
☐ Extended bolt
 Feet:
☒ Ring plastic
☐ Ring painted steel
☐ Vertical shaft up
☐ Vertical shaft down
☐ Cradle
☐ Protection guard
☐ Threaded Holes
☐ Protection guard plastic
☐ Protection guard coated-zynch steel
 Extended_bolt: Threaded_Holes:

4.3 Stator:

Stator Laminated steel diam (mm):
 Stator Laminated steel diam (in):

Stator Stack (mm):
 Stator Stack (in):

4.4 Winding:

Enamelled copper magnet wire cl.H

4.5 Insulation:

Zytel FR70G25V0

4.6 Impregnation

☐ Yes Impregnation, water varnish
☐ Yes Impregnation, special
☒ No Impregnation

4.7 Cable:

Cable Material:
 Cable Length (mm):
 Cable Length (in):
 Cable Temperature Rating °C:
 Cable Temperature Rating °F:

4.8 Terminal box:

Terminal box Material:
 Terminal box Dimension:

4.9 Rotor:

Rotor Laminated steel diam (mm):
 Rotor Laminated steel diam (in):
 Rotor stack (mm):
 Rotor stack (in):

☐ Squirrel cage with Aluminium die casting
☒ Permanent magnet

4.10 Shaft:

Shaft Material:
 Shaft diam (mm):
 Shaft diam (in):
 Shaft lenght (mm):
 Shaft lenght (in):
☒ Single
☐ Double
☒ Thread
 Height (mm):
 lenght (mm):
☐ Flat
 M4

4.11 Bearing:

Ball bearing ☒

Type front:
 Type back:
 Temperature range °C:
 Temperature range °F:
 Sleeve bearing
 Type:

4.12 Electric board:

☒ 1/2 H
☐ 1H

5 ACCESSORIES

5.1 Plate:

5.2 Scroll:

Dimension:
 Material:
 Scroll:

5.3 Blowers:

Dimension:
 Material:
 Blowers:

5.4 Fan Blade:

Dimension:
 Material Fan Blade:

6 TEST

5.1	Dielectric test	In accordance to EN 60335-1
5.2	Insulation Resistance	In accordance to EN 60335-1
5.3	Mechanical characteristic	In accordance to EN 60334-1
5.4	Running-heating test	In accordance to EN 60335-1
5.5	Noise test	In accordance to UNI EN ISO 3741
5.6	Aeraulic test	In accordance to ANSI AMCA 210-99

7 CERTIFICATIONS

6.1	☐ UL	File UL:	
6.2	☒ VDE	File VD	69440026110013-111937-143248 40030335
6.3	☐ CSA	File CS	
6.4	☐ CCC	File CC	
6.5	☐ TUV	File TUV	
6.6	☒ ATEX	File ATE	ITS08ATEX46074
6.7	☐ GOST	File GOST:	
6.8	☐ Others		
6.9	☐ None		

Notes:

8 STANDARD

7.1	EN 60335-1	Safety of household and similar electrical appliances
7.2	EN 60335-2-24	
7.3	EN 60335-2-80	
7.4	EN 60529	Degrees of protection provided by enclosure IP code
7.5	EN 50081-1	Electromagnetic compatibility - generic emission standard - part 1
7.6	EN 60034-1	Rotating electrical machine - part 1 - rating and performance
7.7	2006 95 EEC	Low voltage directive
7.8	2004 108 CEE - 92 31 CEE - 93	EMC directive
7.9	RoHS 2002/95/CE	REDUCTION OF HAZARDOUS SUBSTANCES

Edition

Edition date

SIGNATURE

Enrico Crippa

SIGNATURE

Date