

ACTIONclima[®]



FCA

CASSETTE AD ACQUA
Ventilatore centrifugo
Motore AC/EC

WATER CASSETTE UNITS
Centrifugal fan
EC/AC motor



ECODESIGN

ST-Comp_FCA_20x9Action-R00

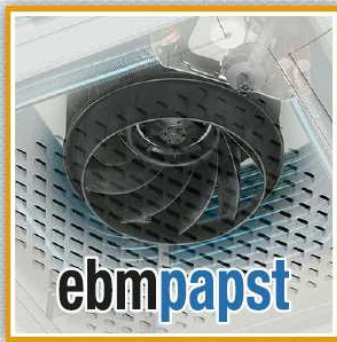
SCHEMA TECNICA: Componenti CW

TECHNICAL SHEET: CW components



- Una macchina speciale, ispirata a dei valori: Rispetto per l'ambiente, Risparmio energetico, Attenzione alla salute, Rispetto del lavoro altrui
- Ventilatore radiale con pale a profilo alare e motore elettrico incorporato: tecnologia ai massimi vertici della qualità, il meglio presente sul mercato, EBM (made in Germany), super-affidabile, altissime efficienze energetiche, grande silenziosità. Disponibile in versione AC~230V-Monofase (mod. FCA) ed EC~230V-Brushless (mod. FCAE)
- Design innovativo frutto di una grande ricerca stilistica mirata a proporre un prodotto con un'estetica di altissimo pregio, impossibile resistergli
- Pompa condensa completa di galleggiante e valvola di non ritorno
- Filtro aria ad alta efficienza, facilmente estraibile e lavabile
- Deflettori mandata aria nelle 4 direzioni, orientabili
- Adatta per installazione su controsoffitti 600x600 [mm x mm], standard Europeo (dimensioni 600x1200 per le taglie grandi)
- Predisposizione 1 Presa aria esterna e 1 Mandata aria trattata verso ambienti attigui
- Regolazione tramite comando remoto a filo o telecomando
- Limiti min/max temperatura acqua ingresso: 3...75°C.

Le vere cassette ad acqua



The real water cassette

- A special machine, inspired by values: Respect for the environment, Energy saving, Attention to health, Respect for the work of the others
- Radial fan with wing profile blades and built-in electric motor: technology at the highest levels of quality, the best available on the market, EBM (made in Germany), super-reliable, extremely high energy efficiency, maximum silence. Available in AC~230V-Single-phase (mod. FCA) and EC~230V-Brushless (mod. FCAE) versions
- Innovative design, result of a great design research aimed to propose a product with the highest quality aesthetic, impossible to resist
- Condensate pump including floater and not-return valve
- High efficiency air filter, easily removable and cleanable
- Air supply fins on the 4 directions, adjustable
- Suitable for installation on false ceiling 600x600 [mm x mm], European standard (dimensions 600x1200 for the big sizes)
- Pre-disposal of 1 external air intake and 1 additional treated air supply
- Control with wired remote control or I.R. control
- Min/max inlet water temperature limits: 3...75 °C.

Fan282x146_AC-50Win (EMB_R4E280AM1911)_P1/3

Item no. 14619-5-9980 · ENU · Change 89188 · Approved 2016-08-25



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R4E280-AM19-11



AC centrifugal fan

backward-curved

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Amtsgericht (court of registration) Stuttgart · HRB 590142



Fan282x146_AC-50Win (EMB_R4E280AM1911)_P2/3

Nominal data

Type	R4E280-AM19-11	
Motor	M4E068-CF	
Phase		1~
Nominal voltage	VAC	230
Frequency	Hz	50
Method of obtaining data		ce
Valid for approval/standard		CE
Speed (rpm)	min ⁻¹	850
Power consumption	W	50
Current draw	A	0.22
Capacitor	μF	1.5
Capacitor voltage	VDB	400
Capacitor standard		S2 (CE)
Min. back pressure	Pa	0
Min. back pressure	inH ₂ O	0
Min. ambient temperature	°C	-25
Max. ambient temperature	°C	60
Starting current	A	0.25

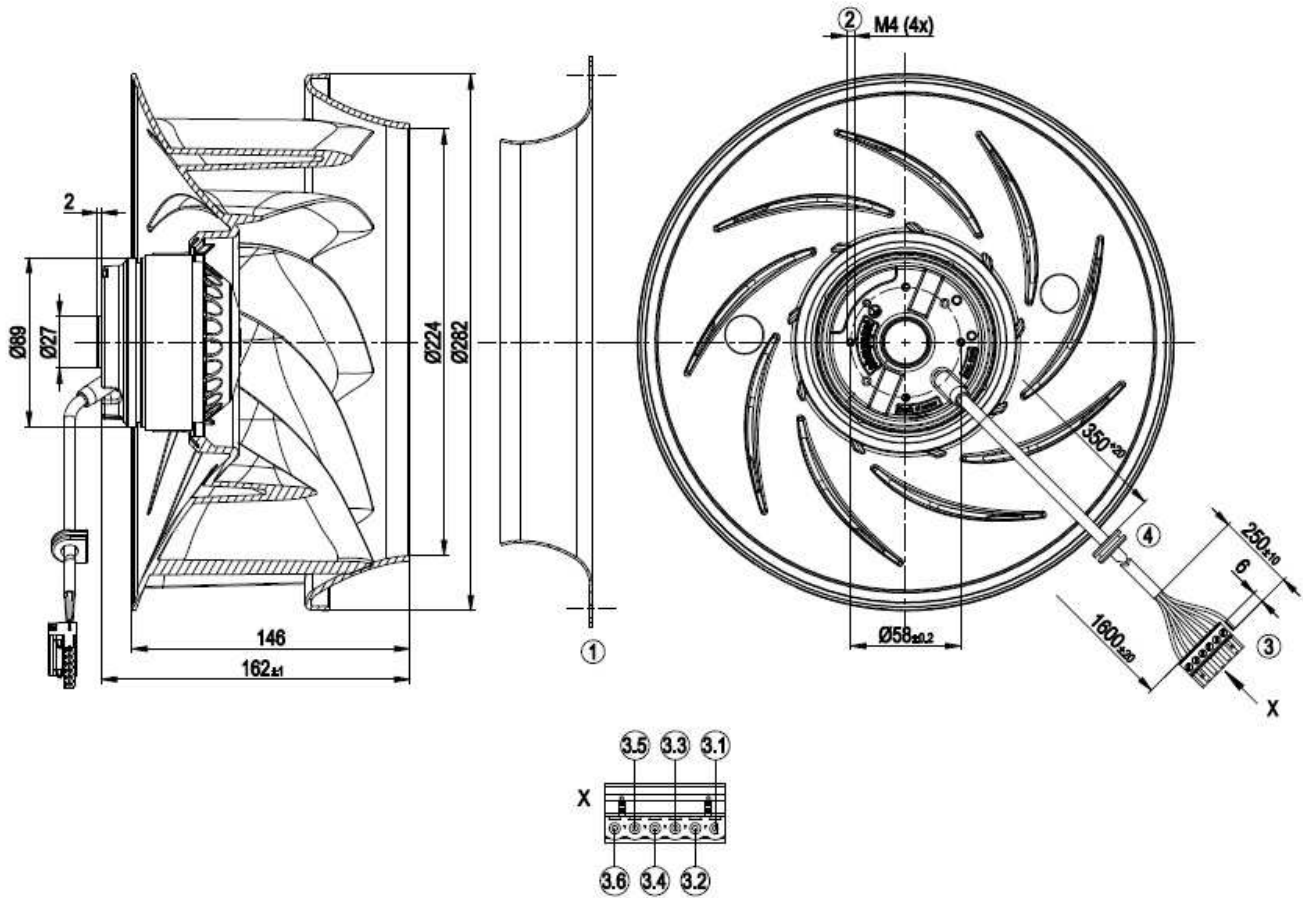
ml = Max. load · me = Max. efficiency · fa = Free air · cs = Customer specification · ce = Customer equipment
Subject to change

Technical description

Weight	2.3 kg
Fan size	280 mm
Rotor surface	Painted black
Impeller material	PA plastic
Number of blades	9
Direction of rotation	Counterclockwise, viewed toward rotor
Degree of protection	IP44; installation- and position-dependent as per EN 60034-5
Insulation class	"B"
Moisture (F) / Environmental (H) protection class	H0+
Max. permitted ambient temp. for motor (transport/storage)	+ 80 °C
Min. permitted ambient temp. for motor (transport/storage)	- 40 °C
Installation position	Shaft horizontal or rotor on bottom; rotor on top on request
Condensation drainage holes	On rotor side
Mode	S1
Motor bearing	Ball bearing
Speed levels	3
Touch current according to IEC 60990 (measuring circuit Fig. 4, TN system)	< 0.75 mA
Motor protection	Thermal overload protector (TOP) internally connected
With cable	Variable
Protection class	I (with customer connection of protective earth)
Conformity with standards	EN 60335-1; CE

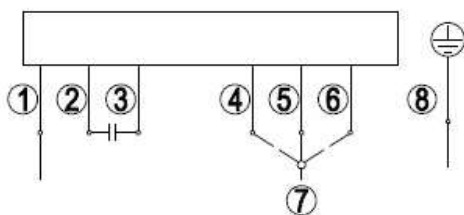
Fan282x146_AC-50Win (EMB_R4E280AM1911)_P3/3

Product drawing



1	Accessory part: inlet ring 31050-2-4013 not included in scope of delivery
2	Max. clearance for screw 5 mm
3	Cable PVC 7G 0.5 mm ² , 1x 6-pole connector housing Phönix 1757051 (MSTB 2.5/6-ST/5.08), 1x crimped splice (green/yellow)
3.1	red (capacitor)
3.2	white (step 1)
3.3	gray (step 2)
3.4	black (step 3)
3.5	blue (N)
3.6	orange (capacitor)
4	Grommet 64901-4-7011 EPDM black

Connection diagram



Note: High speed (step III); low speed (step I)

1	N (blue)	2	Capacitor (red)	3	Capacitor (orange)
4	Step 1 (white)	5	Step 2 (gray)	6	Step 3 (black)
7	L1	8	PE (green/yellow)		

Fan282x146_AC-88Win (EMB_R4E280AM6711)_P1/3

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R4E280-AN67-11



AC centrifugal fan

backward-curved

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Fan282x146_AC-88Win (EMB_R4E280AM6711)_P2/3

Nominal data

Type	R4E280-AN67-11	
Motor	M4E068-DF	
Phase		1~
Nominal voltage	VAC	230
Frequency	Hz	50
Method of obtaining data		ce
Valid for approval/standard		CE
Speed (rpm)	min ⁻¹	1090
Power consumption	W	88
Current draw	A	0.39
Capacitor	μF	3
Capacitor voltage	VDB	400
Capacitor standard		S2 (CE)
Min. back pressure	Pa	0
Min. back pressure	inH ₂ O	0
Min. ambient temperature	°C	-25
Max. ambient temperature	°C	45
Starting current	A	0.55

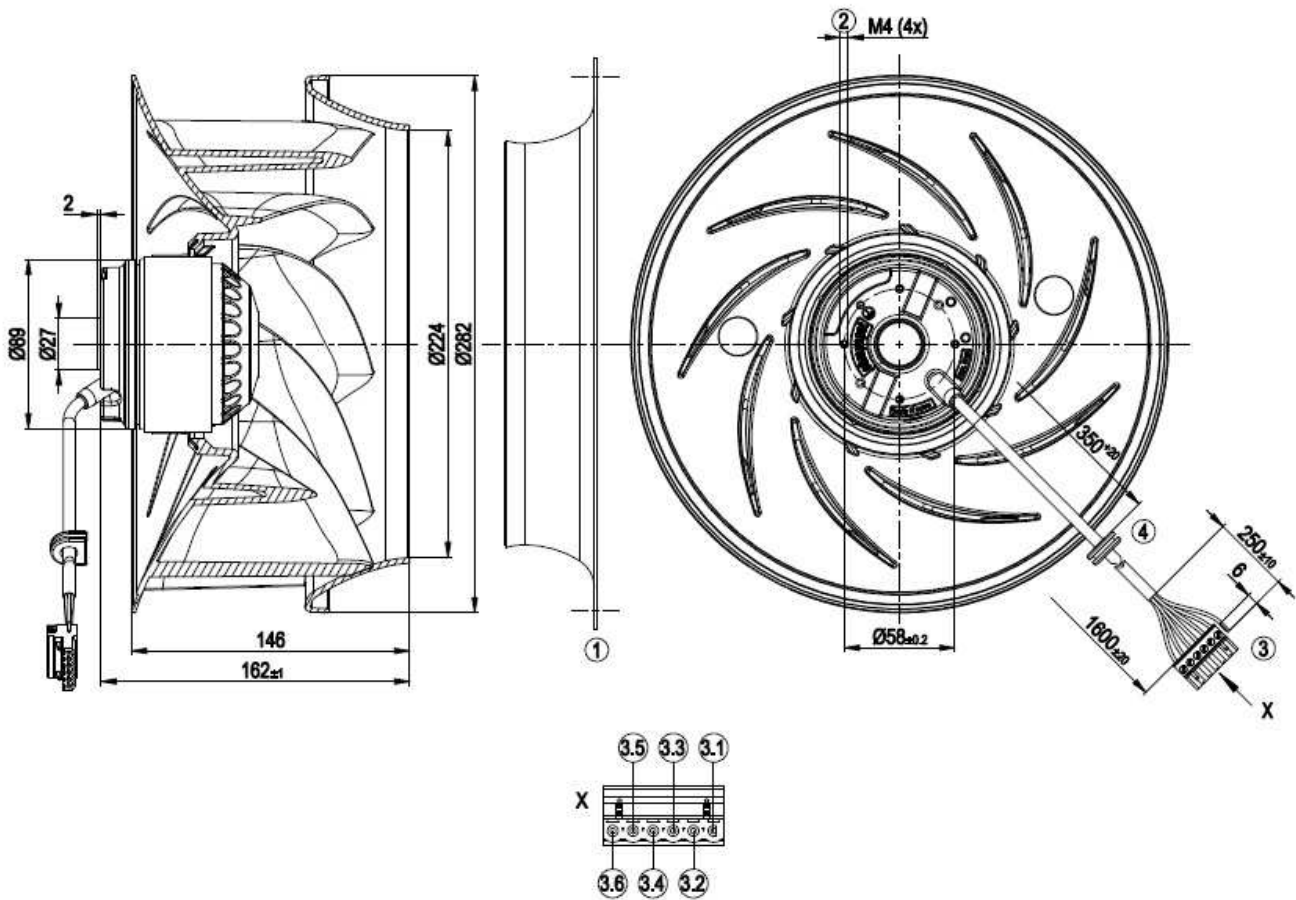
ml = Max. load · me = Max. efficiency · fa = Free air · cs = Customer specification · ce = Customer equipment
Subject to change

Technical description

Weight	2.3 kg
Fan size	280 mm
Rotor surface	Painted black
Impeller material	PA plastic
Number of blades	9
Direction of rotation	Counterclockwise, viewed toward rotor
Degree of protection	IP44; installation- and position-dependent as per EN 60034-5
Insulation class	"B"
Moisture (F) / Environmental (H) protection class	H0+
Max. permitted ambient temp. for motor (transport/storage)	+ 80 °C
Min. permitted ambient temp. for motor (transport/storage)	- 40 °C
Installation position	Shaft horizontal or rotor on bottom; rotor on top on request
Condensation drainage holes	On rotor side
Mode	S1
Motor bearing	Ball bearing
Speed levels	3
Touch current according to IEC 60990 (measuring circuit Fig. 4, TN system)	< 0.75 mA
Motor protection	Thermal overload protector (TOP) internally connected
With cable	Variable
Protection class	I (with customer connection of protective earth)
Conformity with standards	EN 60335-1; CE

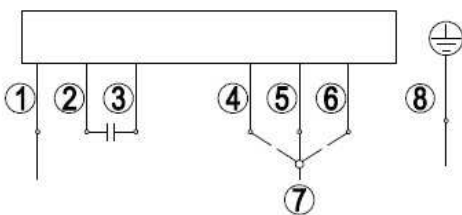
Fan282x146_AC-88Win (EMB_R4E280AM6711)_P3/3

Product drawing



1	Accessory part: inlet ring 31050-2-4013 not included in scope of delivery
2	Max. clearance for screw 5 mm
3	Cable PVC 7G 0.5 mm ² , 1x 6-pole connector housing Phönix 1757051 (MSTB 2.5/6-ST/5.08), 1x crimped splice (green/yellow)
3.1	red (capacitor)
3.2	white (step 1)
3.3	gray (step 2)
3.4	black (step 3)
3.5	blue (N)
3.6	orange (capacitor)
4	Grommet 64901-4-7011 EPDM black

Connection diagram



Note: High speed (step III); low speed (step I)

1	N (blue)	2	Capacitor (red)	3	Capacitor (orange)
4	Step 1 (white)	5	Step 2 (gray)	6	Step 3 (black)
7	L1	8	PE (green/yellow)		

Fan282x146 EC-74Win (EBM R3G280AP0309) P1/3

Item no. 52023-5-9980 · ENU · Change 89188 · Approved 2016-04-29



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R3G280-AP03-09



EC centrifugal fan

backward-curved

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Fan282x146_EC-74Win (EBM_R3G280AP0309)_P2/3

Nominal data

Type	R3G280-AP03-09	
Motor	M3G055-DF	
Phase		1~
Nominal voltage	VAC	230
Nominal voltage range	VAC	200 .. 240
Frequency	Hz	50/60
Method of obtaining data		ml
Speed (rpm)	min ⁻¹	1220
Power consumption	W	74
Current draw	A	0.64
Min. ambient temperature	°C	-25
Max. ambient temperature	°C	55

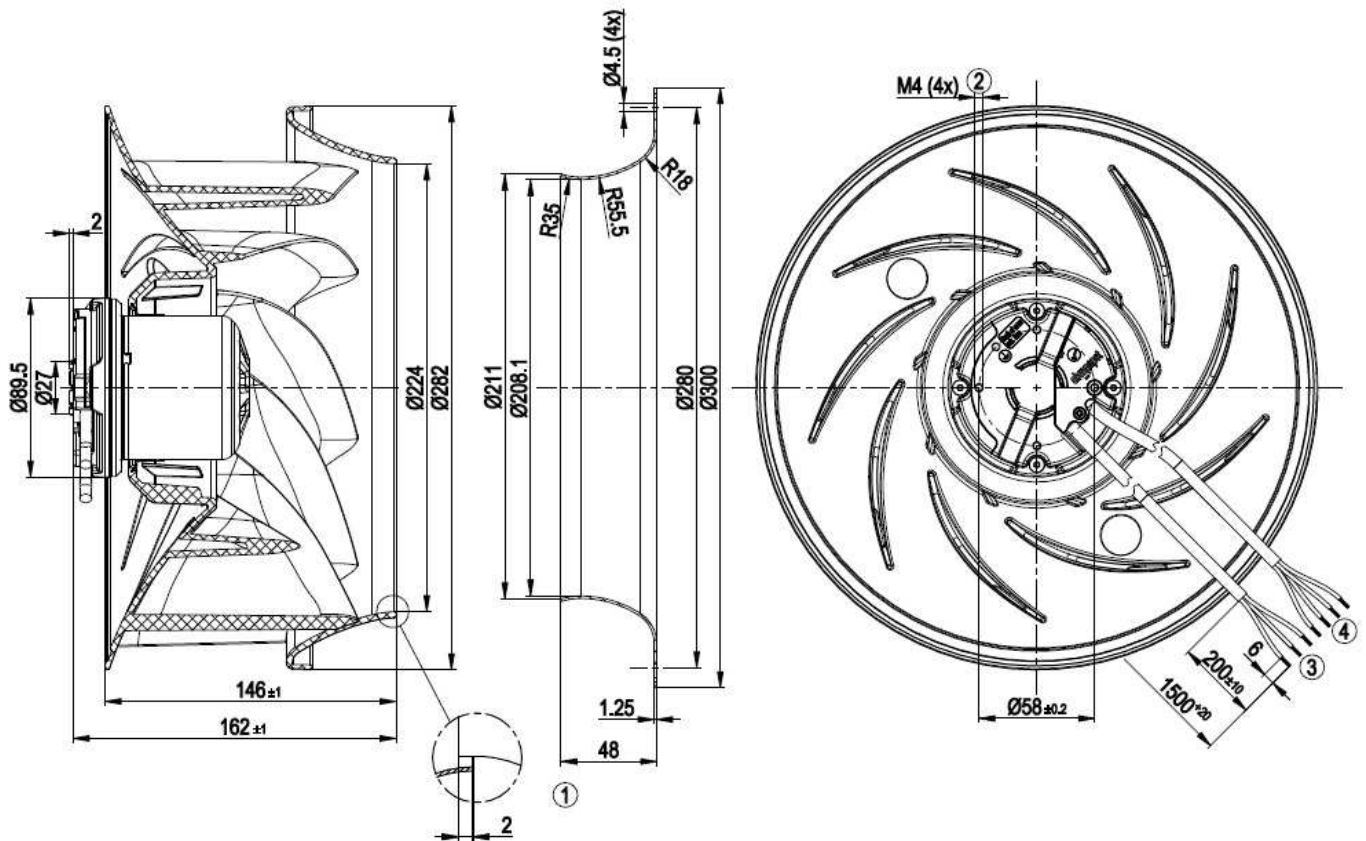
ml = Max. load · me = Max. efficiency · fa = Free air · cs = Customer specification · ce = Customer equipment
 Subject to change

Technical description

Weight	2.6 kg
Fan size	280 mm
Rotor surface	Thick-film passivated
Impeller material	PA plastic
Number of blades	9
Direction of rotation	Counterclockwise, viewed toward rotor
Degree of protection	IP54
Insulation class	"B"
Max. permitted ambient temp. for motor (transport/storage)	+ 80 °C
Min. permitted ambient temp. for motor (transport/storage)	- 40 °C
Installation position	Any
Condensation drainage holes	None, open rotor
Mode	S1
Motor bearing	Ball bearing
Technical features	<ul style="list-style-type: none"> - Output 10 VDC, max. 1.1 mA - Tach output - Motor current limitation - Soft start - Control input 0-10 VDC / PWM - Control interface with SELV potential safely disconnected from supply - Thermal overload protection for electronics/motor
EMC immunity to interference	According to EN 61000-6-2 (industrial environment)
EMC circuit feedback	According to EN 61000-3-2/3
EMC interference emission	According to EN 55022 (class B, household environment), the application may require ferritic damping in the cable due to the conditions of installation.
Touch current according to IEC 60990 (measuring circuit Fig. 4, TN system)	<= 3.5 mA
Motor protection	Locked-rotor protection
With cable	Variable
Protection class	I (with customer connection of protective earth)
Conformity with standards	EN 60335-1; CE

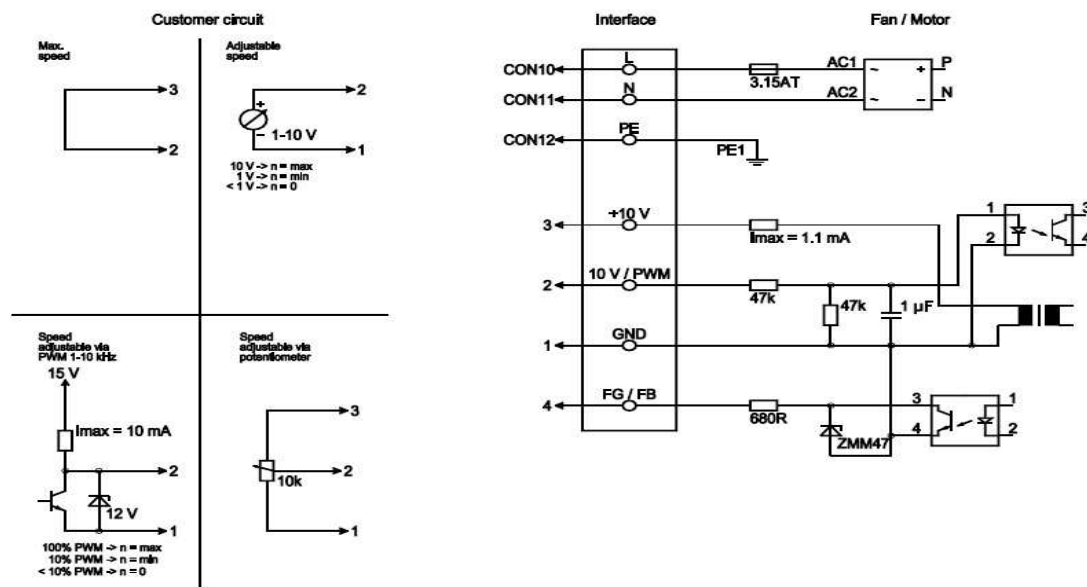
Fan282x146 EC-74Win (EBM R3G280AP0309) P3/3

Product drawing



- 1 Accessory part: inlet ring 31050-2-4013 not included in scope of delivery, other inlet rings on request
- 2 Max. clearance for screw 5 mm
- 3 Cable PVC AWG20, 3x crimped splices
- 4 Cable PVC AWG22, 4x crimped splices

Connection diagram



No.	Conn.	Designation	Color	Function/assignment
	CON10	L	black	Power supply 230 VAC, 50-60 Hz, see nameplate for voltage range
	CON11	N	blue	Neutral conductor
	CON12	PE	green/yellow	Protective earth
	1	GND	blue	GND connection for control interface
	2	0- 10V PWM	yellow	Control input 0-10 V or PWM, electrically isolated
	3	10V/ max 1.1mA	red	Voltage output 10 V / 1.1 mA, electrically isolated, not short-circuit-proof.
	4	FG/FB	white	Fan good / fan bad: open collector, fan good = low, electrically isolated

Pompa condensa (Siccom_CP..SC66..) _P1/3

CENTRIFUGAL PUMP SPECIFICATIONS

- Rated voltage : 230 VAC 50/60 Hz
- Voltage range : $\pm 10\%$ of the rated voltage
- Current : 82mA (230V-50Hz)
- Power consumption : 8W (230V-50Hz)
- Insulation class : Class B
- Ambient Temp : 0 to 45°C
- Temperature Rise : 66 K
- Ambient humidity : 95% RH
- Storage Temp : -20 to 70 °C
- Dielectric strenght : 1500VAC during 1 min (or 1800VAC during 1s)
- Orientation : Motor upside ± 10 degrees
- Fluid : Drain Water
- Drive motor :
 - Type Single phase x Shade type with 2 poles
 - Bobbin material : PA66 UL94 V0
 - Bearing type : Oil impregnated metal bearing
 - Shaft : Stainless Steel
- Flow rate : see the curve
- Noise (rated voltage) at 10 mm water level : 30 cm < 26 dB(A)
- No discharge Pump Head : 113 cm ± 6 cm
- IP54
- CE
- Precautions for use :
 - Check for magnetic interference of surrounding equipment on the motor characteristics.
 - Splashes water, solvent and cleaner can damage the motor.

Flow rate curve

Test conditions : 230 Vac ± 2 - 50Hz
Winding temperature > 30°C
Level of water stabilized at 13 mm from inlet
Tolerance on flow rate $\pm 10\%$ in working range

Level sensor connection

Normally Closed
Normally Opened
Alarm Common
Pump
No connected

Modifications

Ind. Rev.	Date	Ech Scale	Date	Visa
Designé par		3 : 4		
Designed by				
Contrôlé par				
Controlled by				
Tolérances générales				
General Tolerance				
Matériau				
Material				
Traitement				
Treatment				
Code article				
Part number				
Issu du plan				
Resulting from the plan				
Reperage				
Reference of part				
Service	Design	Format	A3	
Department		Size		

CP..SC66..
Centrifugal pump

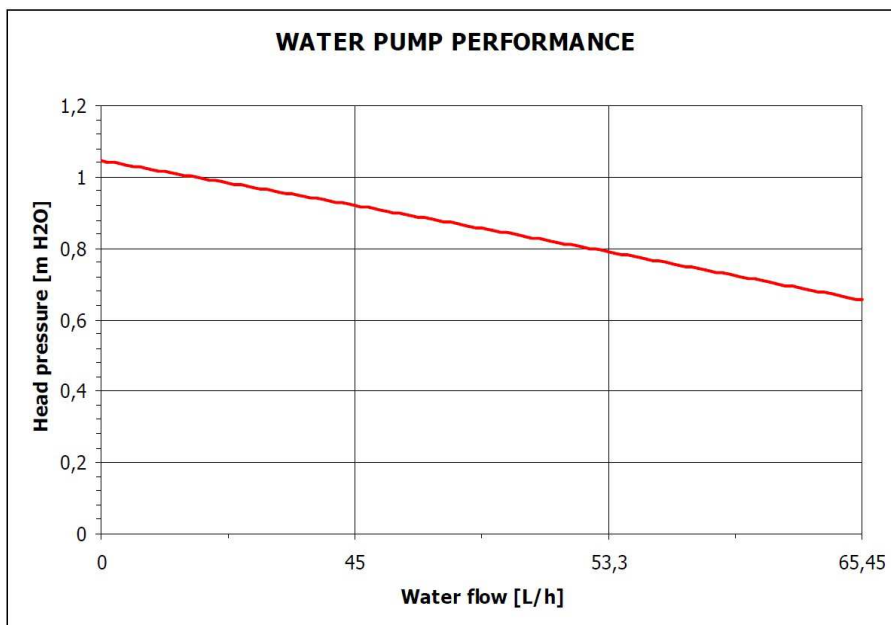
Folio 1/1 Ind. Rev.

Curva caratteristica della pompa condensa installata sulle cassette ad acqua

- Rilevazione effettuata con valvola di non ritorno installata.
- Mod. pompa: CP..SC66.. ; Costruttore: SICCOM

Characteristic curve of the condensate pump installed on the water cassette

- Detection carried out with non-return valve installed.
- Mod. Pump: CP..SC66.. ; Manufacturer: SICCOM



In condizioni limite ($T_a=35^\circ\text{C}$, $UR=100\%$, $T_w=5/10^\circ\text{C}$) la massima produzione di acqua condensata è pari a $Q_w=... \text{ l/h}$
 → Risulta Altezza massima (vedi curva caratteristica): $H=... \text{ m}$
 In condizioni nominali ($T_a=27^\circ\text{C}$ d.b., 19°C u., $T_w=7/12^\circ\text{C}$) la massima produzione di acqua condensata è pari a $Q_w=... \text{ l/h}$
 → Risulta Altezza massima (vedi curva caratteristica): $H=... \text{ m}$

In limit conditions ($T_a=35^\circ\text{C}$, $RH=100\%$, $T_w=5/10^\circ\text{C}$) the maximum production of condensed water is: $Q_w = ... \text{ l/h}$
 → the maximum height result (see characteristic curve): $H=... \text{ m}$
 In nominal conditions ($T_a=27^\circ\text{C}$ d.b., 19°C u., $T_w=7/12^\circ\text{C}$) the maximum production of condensed water is: $Q_w=... \text{ l/h}$
 → the maximum height result (see characteristic curve): $H=... \text{ m}$

Pertanto nel manuale di installazione viene dichiarato che il dislivello massimo che la pompa può superare, evacuando l'acqua prodotta dalla cassetta in normali condizioni di funzionamento, è pari a: $H_{max} = 0,7\text{m}$ (valore in sicurezza).

Therefore, in the installation manual it is declared that the maximum height that the pump may exceed, by evacuating the water produced from the unit in normal operating conditions, is: $H_{max} = 0,7\text{m}$ (safety value).

SICCOM
INNOVATIVE VISION

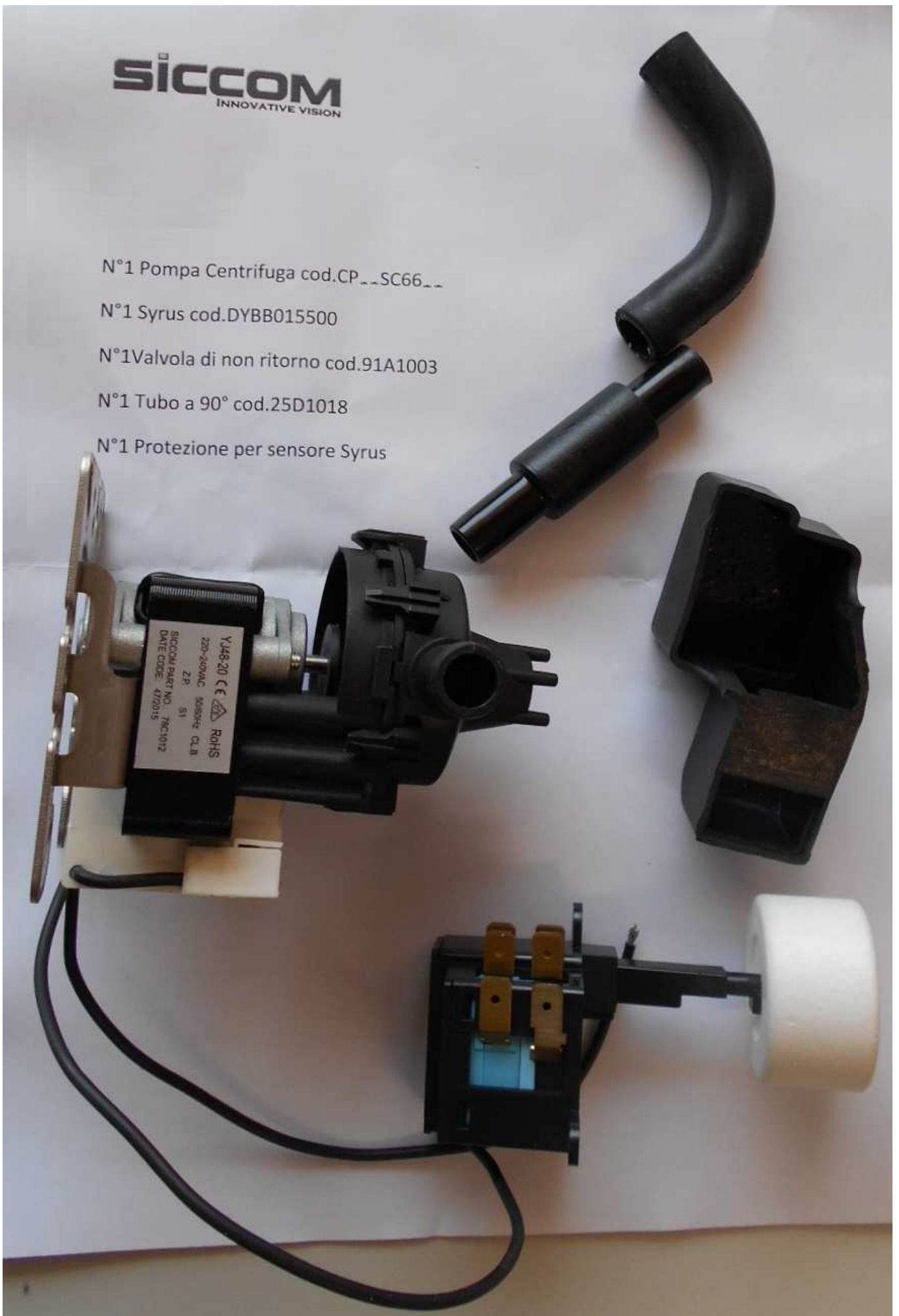
N°1 Pompa Centrifuga cod.CP..SC66..

N°1 Syrus cod.DYBB015500

N°1Valvola di non ritorno cod.91A1003

N°1 Tubo a 90° cod.25D1018

N°1 Protezione per sensore Syrus



Pompa condensa (Siccom_CP..SC66..) _P3/3

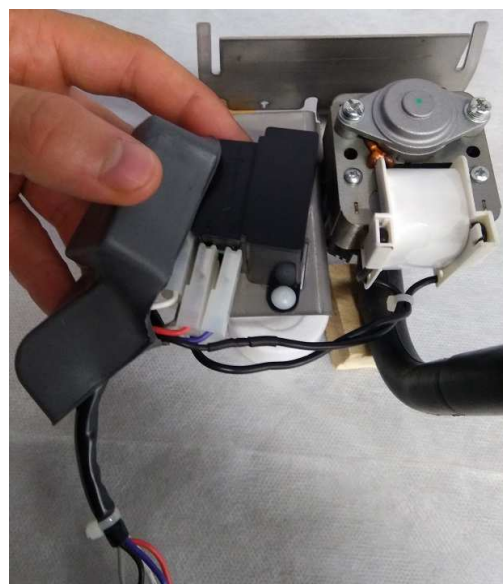


Pompa

Il cavo Nero della pompa diventa Blu sulla prolunga



Prolunga



Cappuccio di protezione parte elettrica sensore



**FX**Ventilconvettori
Fan-coil units**XT**Aerotermini
Aerotherms**FCA**Cassette ad acqua
Water cassette units**XV**Cassonetti Ventilanti
Ventilating Boxes**FW-F**Ventilconvettori Wall
Wall Fan-coil units**XA**Barriere Aria
Air Barriers**UTX**Canalizzabili Piatte/Ribassate
Terminal units Slim/Reduced**XD**Destratificatori
Destratificators**UTY**Canalizzabili Piatte/Medie
Terminal units Slim/Medium**MOTORIZ**Motorizzazioni
Motorizations**UTA**Unità canalizzabili Medie
Medium terminal units**ELECTR**Dispositivi elettrici & Quadri elettrici
Electrical devices & Electric boards**UTH**Termoventilanti Big
Big Thermo-Ventilating units**REG**Regolazione & Comandi remoti
Regulation & Remote controls**GH**Moduli Energetici &
Generatori aria calda a basamento
Energy modules &
Floor standing air heaters**AIR**Serrande aria & Dispositivi aeraulici
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