



EC FANS FOR REFRIGERATION



EC Motor	UC Sync	UC Fly	UC 12	UC +	UC HS	UC Max	UC 40	UC 1
Variable Speed Range (RPM)	1500@50Hz 1800@60Hz	400 - 2300	400 - 2000	400 - 2300	400 - 2800	400 - 2450	400 - 2000	400 - 3000
Nominal Output Power (W)	16W	10W	15W	25W	30W	30W	40W	70W
Voltage/Frequency	120V or 230V 50/60Hz	120V or 230V 50/60Hz	100-240V, 50/60Hz	120V or 230V 50/60Hz	120V or 230V 50/60Hz	100-240V, 50/60Hz	100-240V, 50/60Hz	120V or 230V 50/60Hz
Number of Speeds	Synchronous	1	3	3	3	3	3	3
Reversible	No	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Customer Programmable	No	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Universal Voltage	No	No	Yes	No	No	Yes	Yes	No
Ingress Protection	IP55/IP66	IP55/IP66	IP55/IP66	IP55/IP66	IP55/IP66	IP55/IP66	IP66	IP55
ATEX Compliance	Optional	Optional	Optional	Optional	Optional	Optional	Optional	Optional
Food Grade Materials	Optional	Optional	Optional	Optional	Optional	Optional		

KEY PRODUCTS

UC12 Fan Motor
Nominal 15w Output

**Universal Voltage
for Every Application**

UC Max Fan Motor
Nominal 30w Output

UC40 Fan Motor
Nominal 40w Output

Available in 2021

Penta Fan Pack
172mm or 200mm





APPLICATIONS



- Multideck Display Cases
- Serve Over Counters
- Bottle coolers
- Frozen Food Cabinets
- Vending machines
- Small walk in coolers
- Ice machines
- Light commercial ventilation units

FEATURES

- 70% efficiency or greater
- Incorporated 'soft start' features ensure quiet ramp up to desired speed which assists in eliminating vibration noise & increasing life expectancy of integrated electronics
- One model covers 1 watt to 40 watts shaft power

SPECIFICATIONS

- Thermal & electronic overload protection
- IP55 or IP66 Rating
- UL, CUL, TUV, CE and ATEX-Approvals



16w Commutated EC Motor
Bottle Coolers | Display Cases | Ventilation

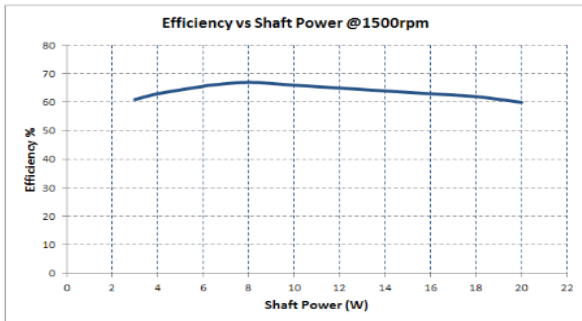
DATASHEET
UC Sync
Refrigeration Fan Motor



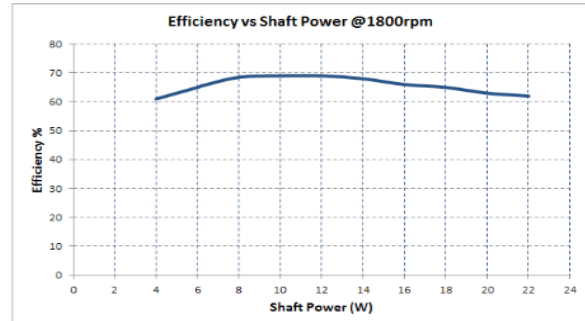
SPECIFICATION

Rated Voltage	120 / 230-240Vac, 50/60Hz
Temperature Range	-40°C to +50°C
Rated Current	0.4A / 0.25A
Efficiency	≤ 70%
Output Power	0 – 16W
Rated Speed	50Hz : 1500rpm / 60HZ : 1800rpm
Speed Selection	Synchronous options.
Direction of Rotation	CCW, CW
Reverse Speed	Timed reverse programmable options.
Motor Protection	Electrically Protected (EP)
Ground Protection	Double Insulation
Insulation Class	Class B
Bearing	608 sealed ball bearings
Approvals	UL / TÜV / CE / RCM / CCC (Pending)
Ingress Protection	IP55

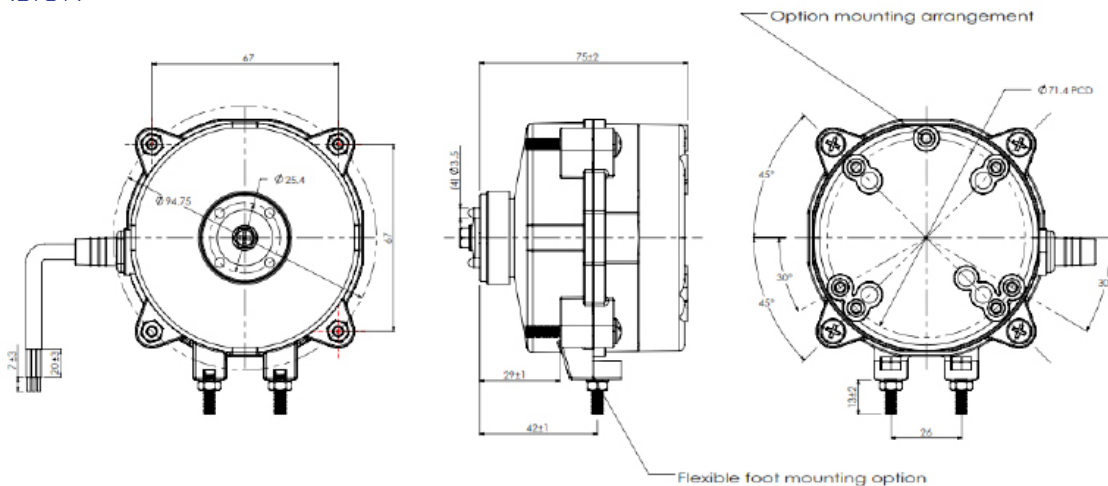
PERFORMANCE : 50Hz / 1500rpm Synchronous



PERFORMANCE : 60Hz / 1800rpm Synchronous



DIMENSION





10w Commutated EC Motor
 Bottle Coolers | Display Cases | Ventilation

DATASHEET
 UC Fly (FM115609xx/
 FM115709xx)



SPECIFICATION

Rated Voltage	120 / 230Vac (+/-10%), 50/60Hz
Temperature Range	-40°C to +50°C
Rated Current	0.2A / 0.14A
Efficiency	≤ 65%
Output Power	0 – 8W
Rated Speed	400 to 2300rpm (+/-1%)
Speed Selection	3 discrete programmable speeds.
Direction of Rotation	CCW, CW, reverse on start
Motor Protection	Electronically Protected (EP)
Ground Protection	Double Insulation
Insulation Class	Class B
Bearing	608 sealed ball bearings
Approvals	UL / TÜV / CE / RCM / CCC
Ingress Protection	IP55
Hydrocarbon Compatibility*	EN60335-2-89 ANNEX BB / ATEX

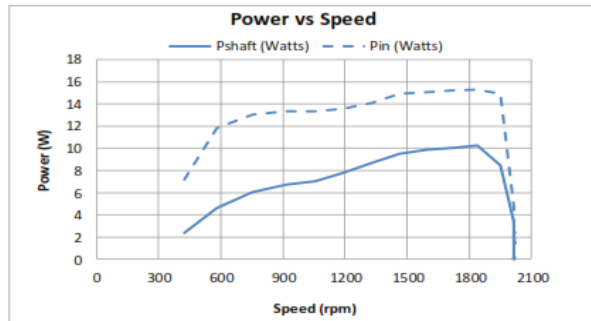
*Optional: Available on request

WIRING DIAGRAM

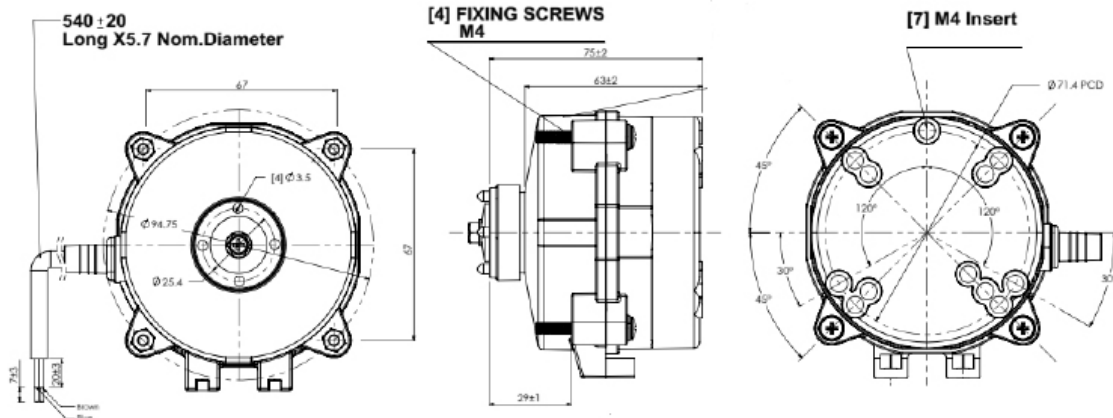
Wiring diagram		DOR
Brown Blue	P N ———— 230 Vac	CCW
Brown Blue	P N ———— 230 Vac	CCW
Brown Blue	P N ———— 230 Vac	CCW

BLUE
Neutral
BROWN
Phase

PERFORMANCE



DIMENSION





Nominal 15w Output Commutated EC Motor for bottle coolers, display cases and ventilation

Universal voltage for every application

- Suitable for up to 9" blades
- UL approval
- Optional food grade material

DATASHEET UC 12 (FM124809XX)



SPECIFICATION

Global Voltage	100 - 250Vac, 50/60Hz
Temperature Range	-40°C to +50°C
Rated Current	0.29/0.25a
Efficiency	≤ 70%
Output Power	0 – 12W
Rated Speed	300 to 2400rpm (+/-1%)
Speed Selection	3 discrete programmable speeds.
Direction of Rotation	CCW, CW, reversible
Reverse Speed	timed reverse options available
Motor Protection	Electrically Protected (EP)
Ground Protection	Double Insulation
Insulation Class	Class B
Bearing	608 sealed ball bearings
Approvals	UL / tÜV / CE / RCM / CCC
Ingress Protection	IP55 / IP66*
Hydrocarbon Compatibility*	En60335-2-89 annEX BB / atEX

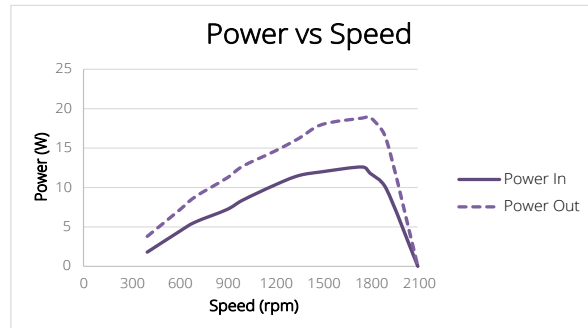
*option on request : Please discuss with our representative.

WIRING DIAGRAM

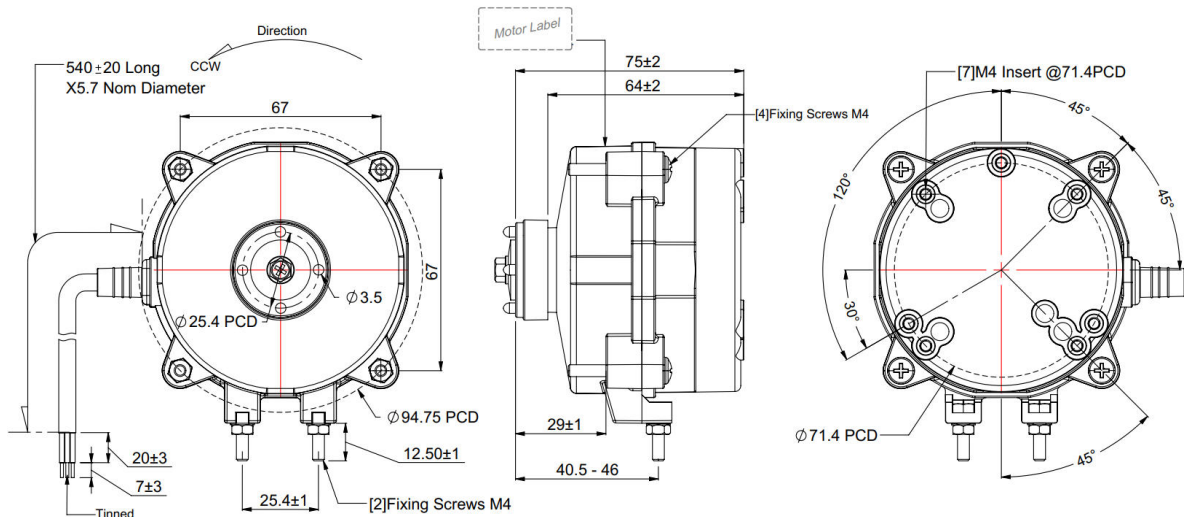
	SPEED 1
	SPEED 2
	SPEED 3

BLACK Control Wire
 BLUE Neutral
 BROWN Phase

PERFORMANCE



DIMENSION





25w Commutated EC Motor
 Bottle Coolers | Display Cases | Ventilation

DATASHEET
 UC+ (FM103609xx/
 FM103709xx)



SPECIFICATION

Rated Voltage	120 / 230Vac (+/-10%), 50/60Hz
Temperature Range	-40°C to +50°C
Rated Current	0.42A / 0.25A
Efficiency	≤ 70%
Output Power	0 – 25W
Rated Speed	400 to 2300rpm (+/-1%)
Speed Selection	3 discrete programmable speeds.
Direction of Rotation	CCW, CW, reversible
Reverse Speed	Timed reverse programmable options.
Motor Protection	Thermally Protected (TP)
Ground Protection	Double Insulation
Insulation Class	Class B
Bearing	608 sealed ball bearings
Approvals	UL / TÜV / CE / RCM / CCC
Ingress Protection	IP55
Hydrocarbon Compatibility*	EN60335-2-89 ANNEX BB / ATEX

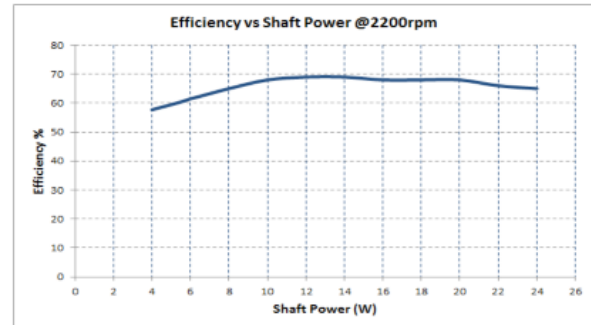
*Optional: Available on request

WIRING DIAGRAM

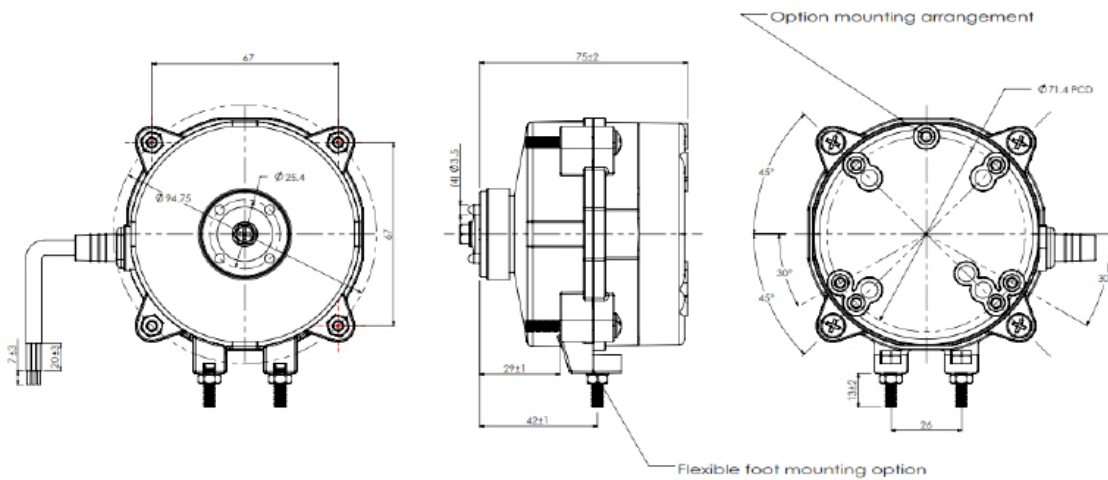
Black	C	230 Vac	SPEED 1
Brown	N		
Blue	P		
Black	C	230 Vac	SPEED 2
Blue	N		
Brown	P		
Black	C	230 Vac	SPEED 3
Blue	N		
Brown	P		

BLACK Control
 Wire BLUE
 Neutral BROWN
 Phase

PERFORMANCE



DIMENSION





30w Commutated EC Motor
 Bottle Coolers | Display Cases | Ventilation

DATASHEET
 UC-HS (FM127X09)



SPECIFICATION

Rated Voltage	120 / 230Vac (+/-10%), 50/60Hz
Temperature Range	-40°C to +50°C
Rated Current	0.5A / 0.32A
Efficiency	≤ 70%
Output Power	30W Nominal
Rated Speed	400 to 2800rpm (+/-1%)
Speed Selection	3 discrete programmable speeds.
Direction of Rotation	CCW, CW, reversible
Reverse Speed	Timed reverse programmable options.
Motor Protection	Thermally Protected (TP)
Ground Protection	Double Insulation
Insulation Class	Class B
Bearing	608 sealed ball bearings
Approvals	UL / TÜV / CE / RCM / CCC
Ingress Protection	IP55 / IP66 *
Hydrocarbon Compatibility*	EN60335-2-89 ANNEX BB / ATEX

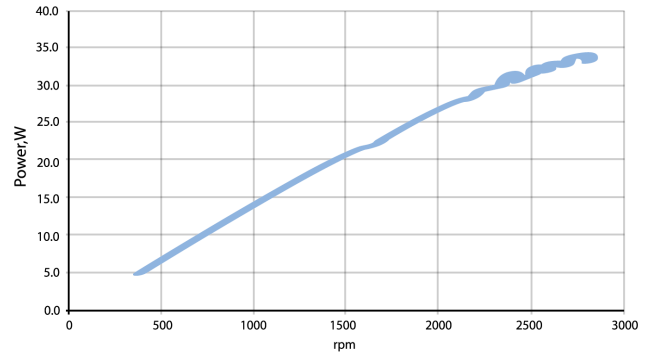
*Option on request

WIRING DIAGRAM

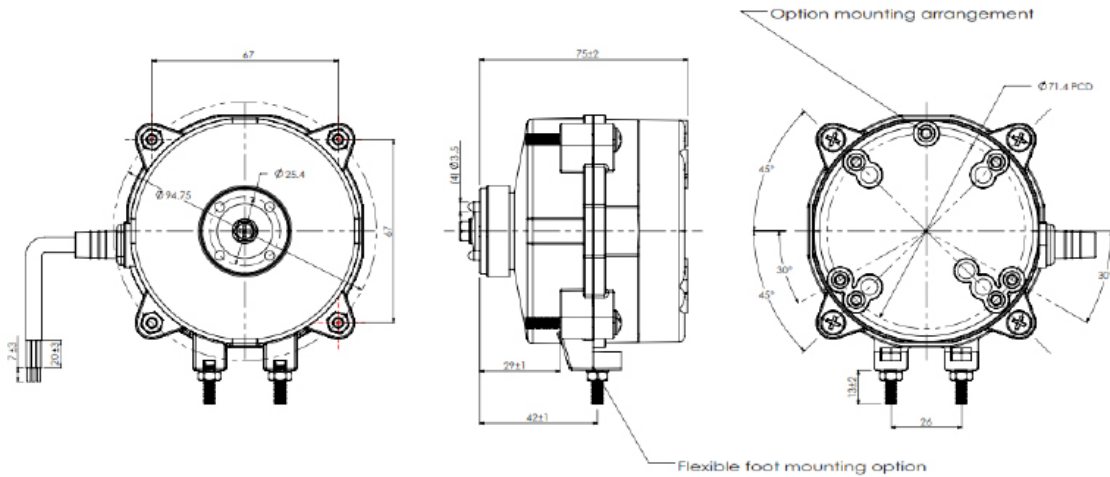


BLACK Control Wire
 BLUE Neutral
 BROWN Phase

PERFORMANCE



DIMENSION





30w Commutated EC Motor
Bottle Coolers | Display Cases | Ventilation

DATASHEET
UC MAX (FM127209XX)



SPECIFICATION

Rated Voltage	100-240 Vac (+/-10%), 50/60Hz
Temperature Range	Temperature range -40°C to +50°C
Rated Current	0.7 / 0.4A
Efficiency	≤ 70%
Output Power	30W Nominal
Rated Speed	400 to 2800rpm (+/-1%)
Speed Selection	3 discrete programmable speeds.
Direction of Rotation	CCW, CW, reversible
Reverse Speed	Timed reverse programmable options.
Motor Protection	Electrically Protected (EP)
Ground Protection	Double Insulation
Insulation Class	Class B
Bearing	608 sealed ball bearings
Approvals	UL / TÜV / CE / RCM / CCC
Ingress Protection	IP55 / IP66 *
Hydrocarbon Compatibility*	EN60335-2-89 ANNEX BB / ATEX

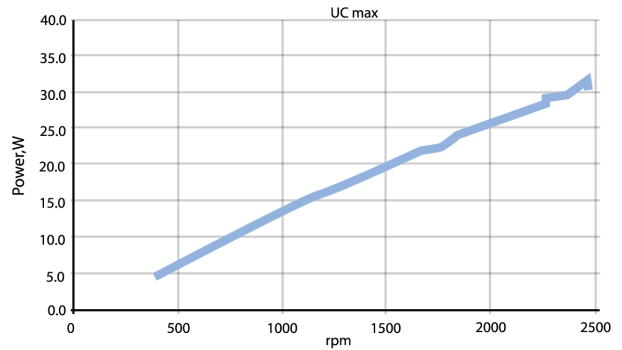
*Option on request : Please discuss with our representative.

WIRING DIAGRAM

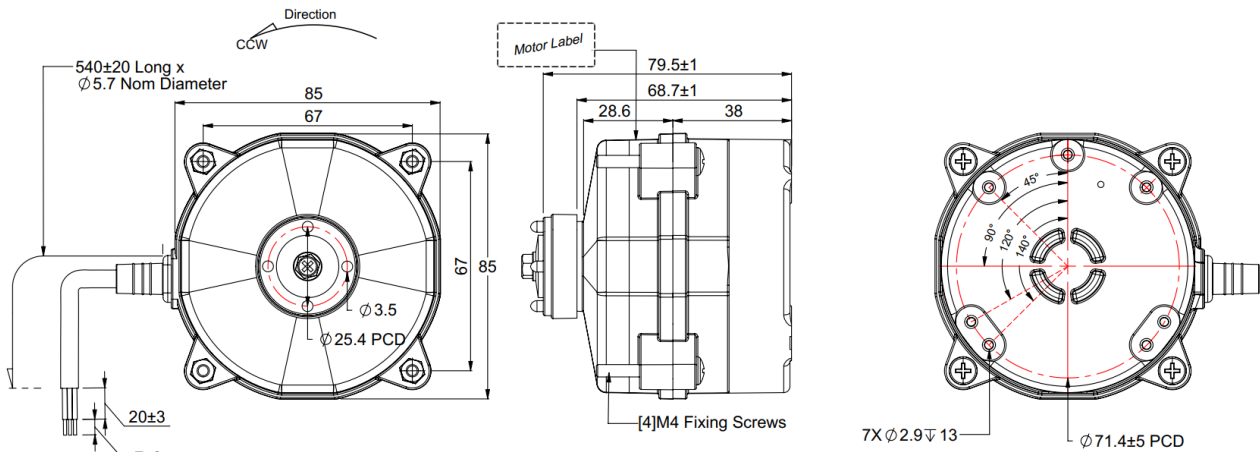


BLACK Control Wire
BLUE Neutral
BROWN Phase

PERFORMANCE

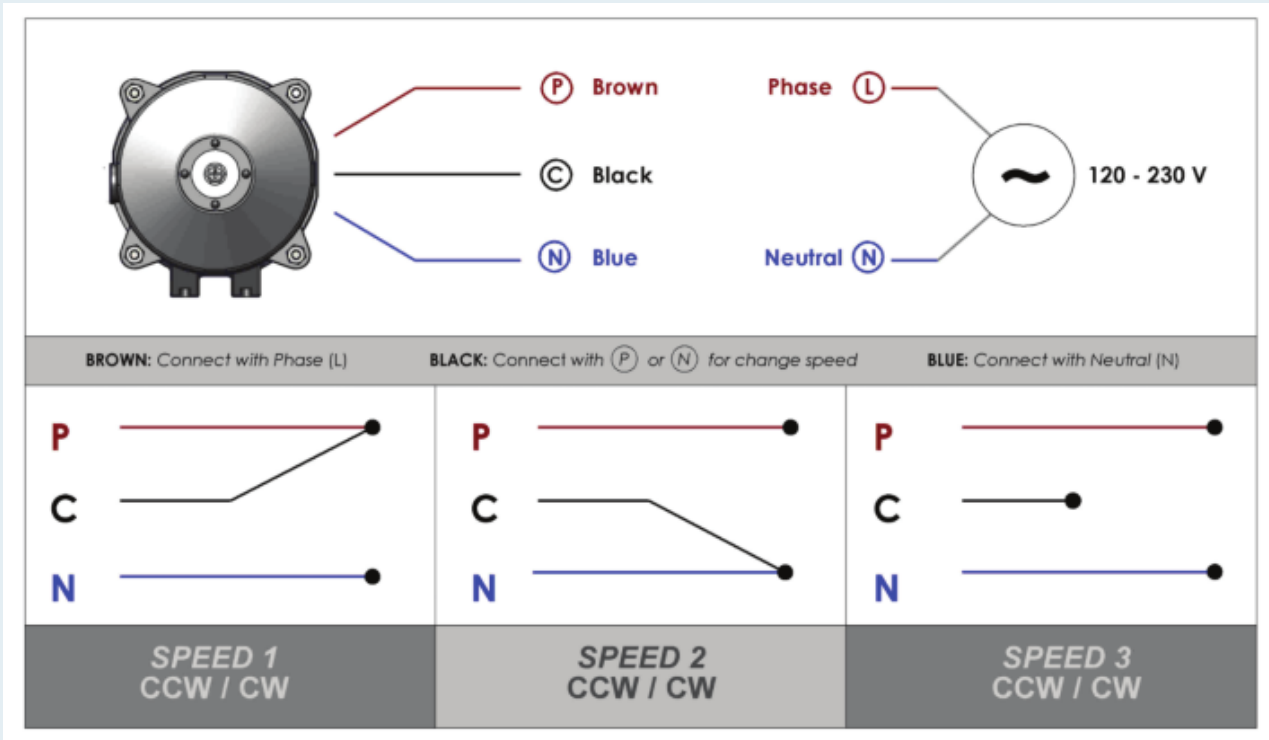


DIMENSION

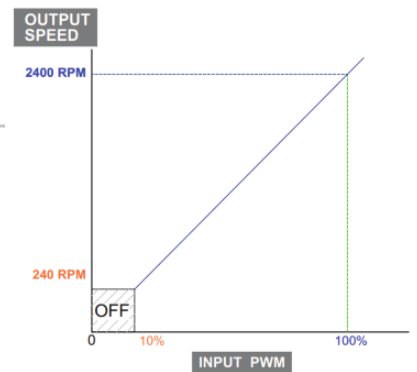
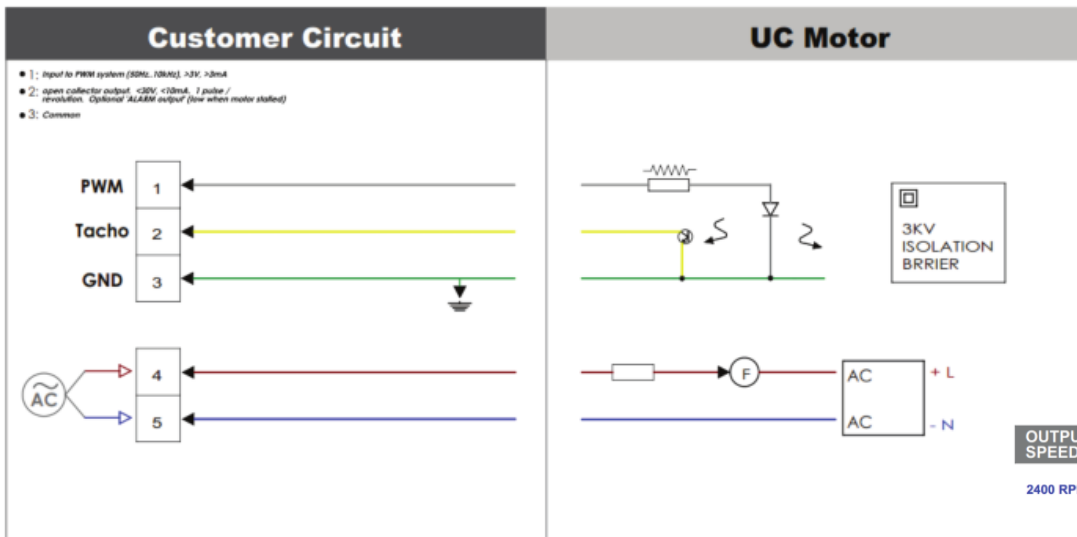




UC SERIES: 3-WIRE OPTION



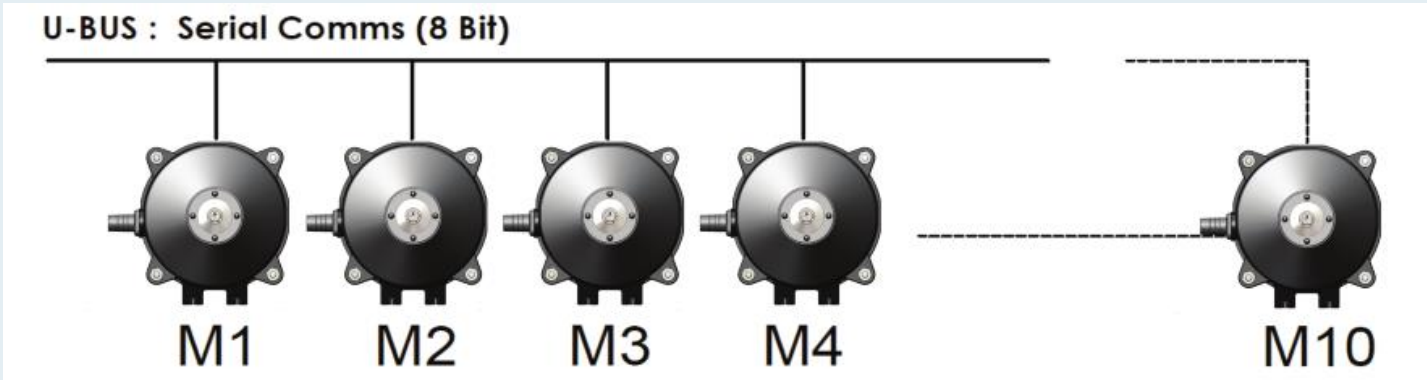
UC SERIES: PWM WIRING OPTION



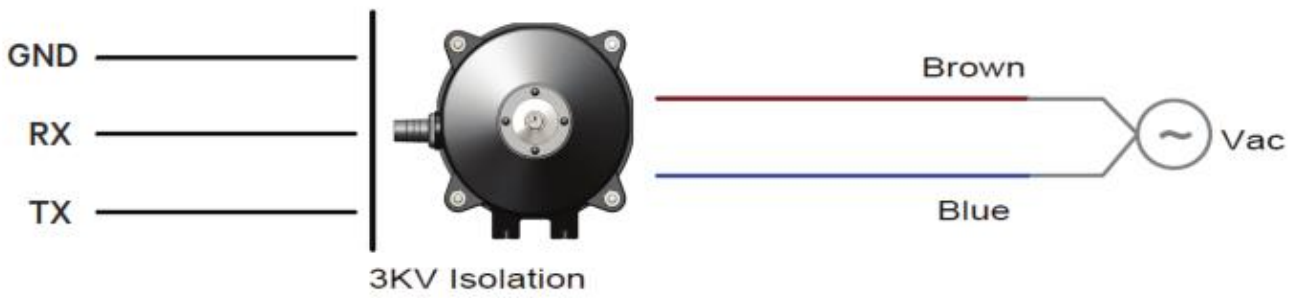
Function: Optional parameter possible



UC SERIES: BUS COMMUNICATION NETWORK SYSTEM OPTION



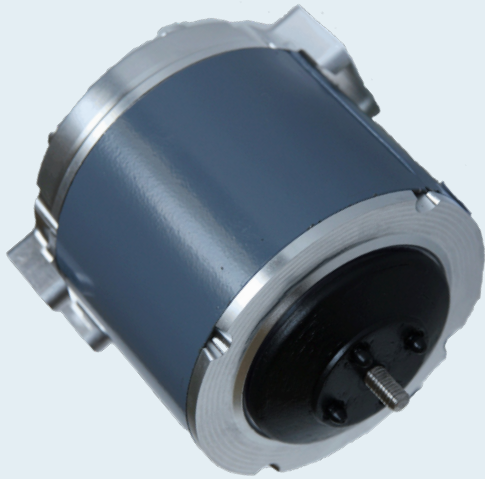
Wiring:





40w Commutated EC Motor
Walk-In Coolers | Evaporators | Condensers | Ventilation

PRELIMINARY: available 2021



DATASHEET
UC40

SPECIFICATION

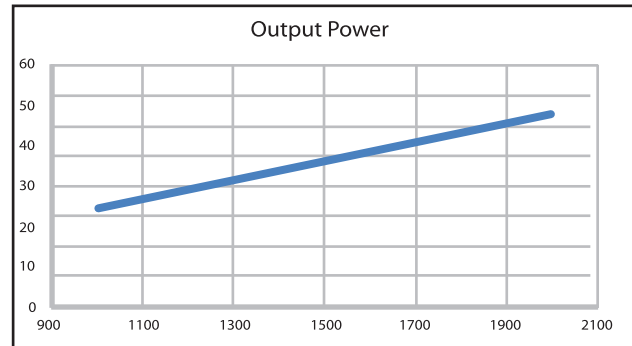
Rated Voltage	100 - 240Vac (+/-10%), 50/60Hz
Temperature Range	-30°C to +50°C
Thermal Derate	Torque compensation in overload condition
Protection Rated Current	0.8/ 0.4A
Efficiency	≤ 75%
Output Power	40W Nominal (1/20th hp@1550 rpm)
Rated Speed	400 to 2000 rpm (+/-1%)
Speed Selection	3 discrete programmable speeds.
Direction of Rotation	CCW, CW, reversible
Reverse Speed	Timed reverse options available.
Motor Protection	Electronic Protected (EP)
Ground Protection	Earth wire optional
Insulation Class	Class B
Shaft Diameters	8mm
Bearing	608 sealed ball bearings
Approvals	UL / TÜV / CE / RCM
Ingress Protection	IP66

WIRING DIAGRAM

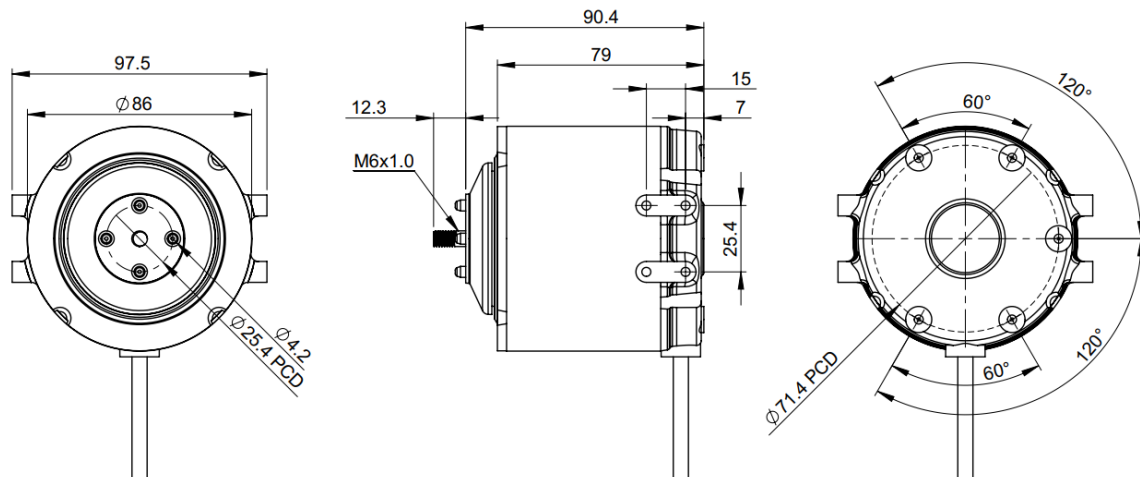


BLACK Control Wire
BLUE Neutral
BROWN Phase

PERFORMANCE



DIMENSION





70w Commutated EC Motor
Walk-In-Coolers | Evaporators | Condensers | Ventilation

DATASHEET
UC1 Refrigeration Motor



SPECIFICATION

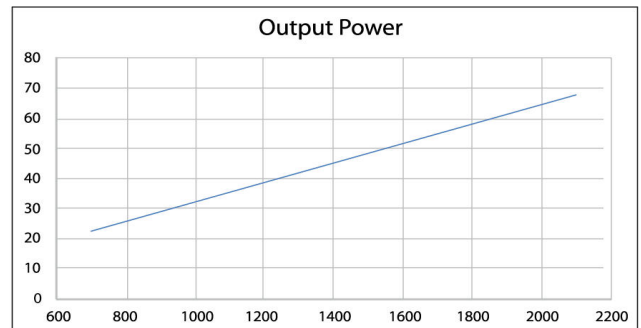
Rated Voltage	120 / 230Vac (+/-10%), 50/60Hz
Temperature Range	-30°C to +50°C
Thermal Derate Protection	Torque compensation in overload condition
Rated Current	0.9/ 0.6A
Efficiency	≤ 75%
Output Rated Rated	50W (1/15Hp)@1550 rpm
Speed	400 to 2400rpm (+/-1%)
Speed Selection	3 discrete programmable speeds.
Direction of Rotation	CCW, CW, reversible
Reverse Speed	timed reverse options available.
Motor Protection	Electronic Protected (EP)
Ground Protection	Earth wire provided
Insulation Class Shaft	Class B
Diameters Bearing	8mm (D-Flat:7mm)
Approvals	608 /6201 sealed ball bearings
Ingress protection	UL / tÜV / CE / RCM / CCC IP55

WIRING DIAGRAM

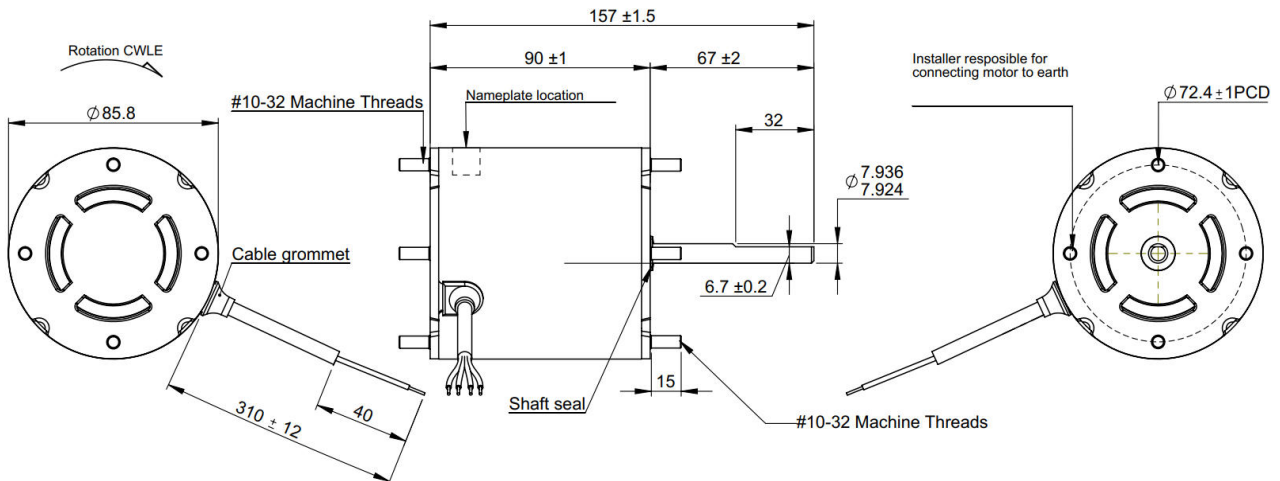


BLACK Control
BROWN Phase
BLUE Neutral
* Ground/Earth wire on request.

PERFORMANCE



DIMENSION





PATENT PENDING

DATASHEET
Penta 200 Fanpack



SPECIFICATION

Rated voltage	120 / 230Vac (+/-10%), 50/60Hz
Temperature range	-40°C to +50°C
Rated current	0.42A / 0.25A
Absorbed power	0-25W
Rated speed	400 to 2250rpm (+/-1%)
Speed selection	3 discrete programmable speeds.
Direction of rotation	CCW, CW, reversible
Reverse Speed	Timed reverse programmable options.
Motor Protection	Electronically / Thermally Protected
Ground Protection	Double Insulation
Insulation Class	Class B
Bearing	608 sealed ball bearings
Approvals	UL / TÜV / CE / RCM / CCC / ATEX*
Ingress protection	IP55

*Optional: Available on request

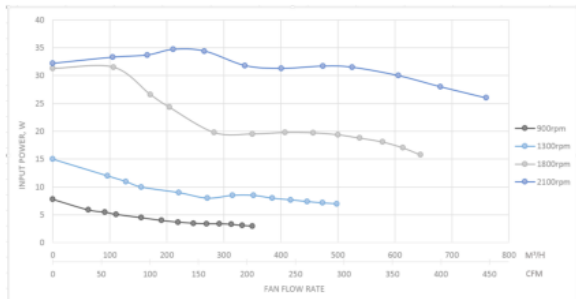
WIRING DIAGRAM

Black	C	230 Vac	SPEED 1
Brown	N		
Blue	P		
Black	C	230 Vac	SPEED 2
Blue	N		
Brown	P		
Black	C	230 Vac	SPEED 3
Blue	N		
Brown	P		

BLACK Control Wire
 BLUE Neutral
 BROWN Phase

PERFORMANCE

Absorbed Power (W)



DIMENSION

