



Remco Products Limited

41 Range Motors



tel: +44(0)1243 528414
fax: +44(0)1243 532127

email: sales@remco.co.uk
web: www.remco.co.uk





41 Range Motors

Throughout the coming year Remco will be undertaking a complete re-launch and update of their Replacement Electric Motor Catalogues and Price Lists.

Our main Motor Catalogue includes all the various frame sizes of motors we are able to supply and has, understandably, become outdated as new models are created and older models have been deleted from our ranges.

It is our intention to create new catalogues, each one dedicated to a particular frame size of motor, and to be accompanied by a separate CD and price list. This, therefore, is the first of the new style motor catalogues to be introduced and we hope that you will find it informative and easy to use.

Our 41 range of motors comprises a number of styles and designs, for replacement use, driving fans in Heating, Ventilating, Air Conditioning and Refrigeration applications. With one exception, 41-4-38/5C, which is a permanent split capacitor motor, 41 range motors are all of Shaded Pole design and require no capacitors to be used in conjunction with them. Most are fitted with oil retaining sleeve bearings for quietness of operation and are all equipped with integral Thermal Protection devices for safety.

Please note: Several motors, formerly 41 range shaded pole motors, have now been re-modelled as 35 range permanent split capacitor, (PSC), motors. These are featured on pages 14 — 19 inclusive.

Applications range from body band mounted centrifugal blowers in Warm Air Central Heating systems, to resiliently mounted single and double shaft motors for fan coils in Heating and Air Conditioning units. Single speed and multi-speed windings are available, but from the nature of their design, reversible running is not possible. However, most motors are available for either Clockwise or Anticlockwise rotation.

Shaft sizes, generally, are either 7.93mm (5/16") or 9.52mm (3/8") diameter and are suited to Remco's wide range of centrifugal fan wheels and axial fan blades. Shaft sleeves and an extensive offering of fan accessories are available and are listed in our separate Fans and Fan Accessories Catalogue which may be requested by telephoning our sales office on 01243 528414, or through our website

Remco Products Limited is the leading UK supplier of fractional horsepower electric motors for Replacement use in Heating, Ventilating, Air Conditioning and Refrigeration applications. Enquiries for any of our range of products are always welcome and will be dealt with professionally and promptly.

Remco is an approved company to ISO 9001:2008



MOTOR TYPES FOR HVACR APPLICATIONS.

SHADED POLE MOTORS:

Remco's 41 range of shaded pole motors is particularly suitable for driving light to medium power fan applications.

They are produced both in 4 and 6 pole versions with outputs ranging from 8 to 80 watts. Generally the range is of single speed motors but there are available some multi-speed motors with 2 and 3 speeds. These are marked with /2 or /3 symbols in the motor identification code in the catalogue.

(As mentioned on the previous page there is one exception in the range which is a PSC motor, 41-4-38/5C, which offers five speeds in total.)

41 range shaded pole motors are suitable for a wide range of fan applications, both axial and centrifugal types. They are available both in Ventilated and Totally Enclosed bodies and may have single or double shaft extensions. Their self-aligning, lubricated for life bearings are designed to provide the quiet running required by many fan applications.

Shaded Pole Motors however, are not suitable for all types of duty. They are the simplest of the various single phase motor types, rugged and easy to manufacture. However, the rotating magnetic field required to provide starting torque and fixed direction of rotation is produced not by a separate start winding, but by a single, permanently short circuited band of copper, the shading ring, fitted to the tip of each pole of the motor. Whilst this is simple, and conveniently, does not require either start switch or capacitors, it has two performance effects which limit the applications to which it is suited.

Firstly, the rotating field produced by the shading ring is relatively small, so a feature of all Shaded Pole motors is that start torque is quite low. This is ideal for fans and light mechanical duties, but insufficient for driving larger and heavier mechanisms with greater friction to overcome.

Secondly, the short circuited shading ring is in circuit whenever the motor is running and produces an appreciable power loss. This power loss is in the form of heat and cooling air is therefore required to dissipate the heat so generated. This is usually achieved by making the motor with ventilated construction, adding a small external cooling fan, or in the case of air moving motors, by situating the motor in the airstream of the fan. Motors are frequently referred to as being "airstream" rated, and these should not be run without cooling air, otherwise they will quickly overheat.

Largely due to the losses caused by the shading ring, all shaded pole motors tend to have low efficiency, (25% is quite typical), and because the shading ring power loss is higher in larger output motors, the power output rating of this type of motor is generally limited to levels below 100 watts.

Fans applying less than 80 watts load to the motor, and particularly where some cooling air can pass over the motor body, are ideal applications for this simple and popular style of motor.

Ask our Technical Department if you are not sure whether a Shaded Pole motor is suitable for your application — they will be pleased to advise you.

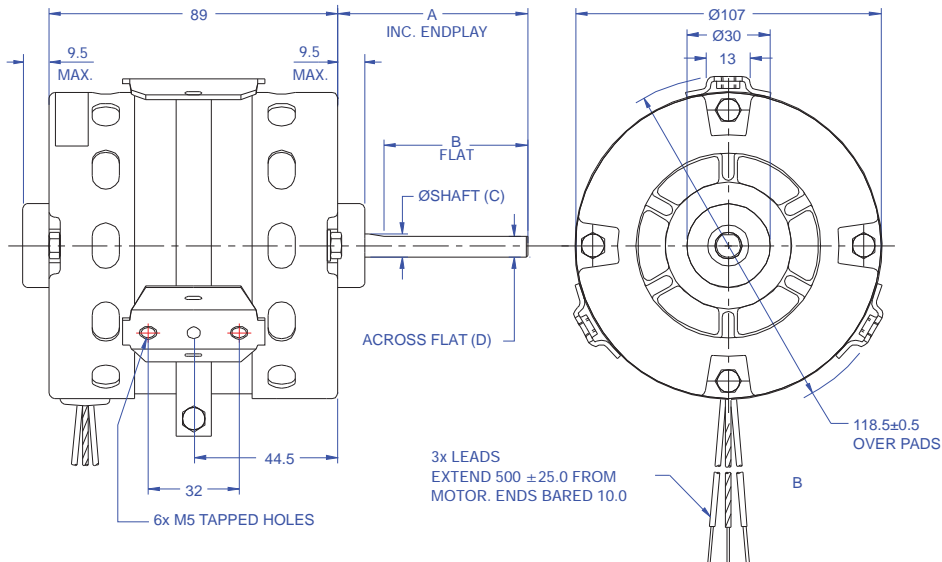
41 Range Motors

Radial Mount - 4 Pole



Features

- Run Speed - 1275 RPM
- Supply - 230V, 50Hz
- Ventilated Enclosure
- Sleeve Bearing
- Airstream Rated
- Thermal Overload Protection

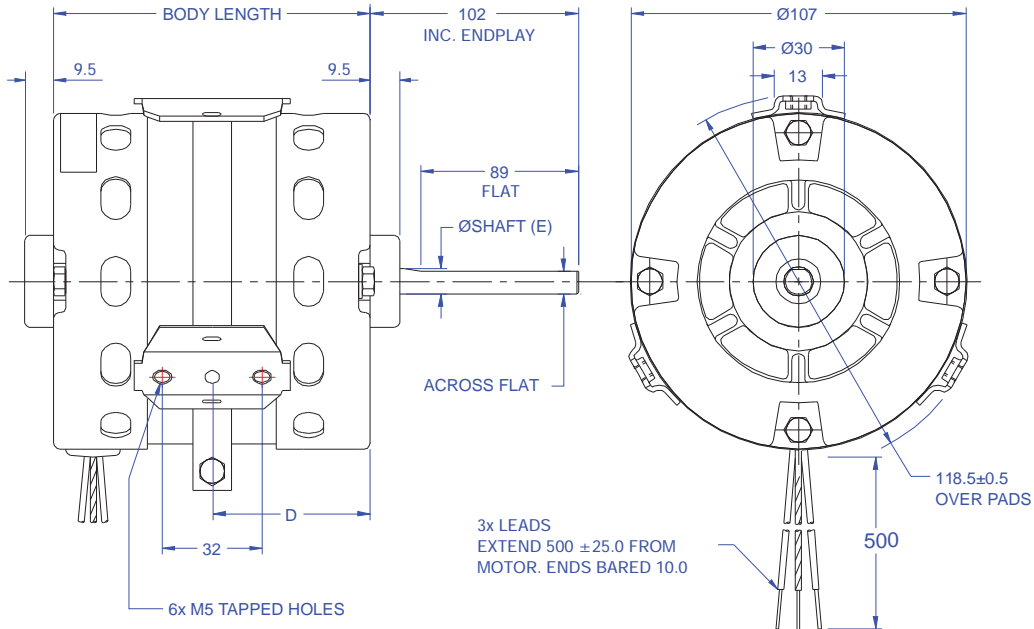


Model No.	Watts (out)	Current (A)	Rotation (Shaft end)	A mm	B mm	C mm	D mm	E mm
* 41-4-18A	18	0.59	ACW	187	165	9.52	8.5	760
41-4-25AV	25	0.61	ACW	46.5	30	9.52	8.5	510
41-4-25CV	25	0.61	CW	46.5	30	9.52	8.5	510
41-4-25AVF	25	0.7	ACW	46.5	30	7.93	7.0	510
41-4-25CVF	25	0.7	CW	46.5	30	7.93	7.0	510
41-4-35A	35	1.0	ACW	72	56	9.52	8.5	850
41-4-35C	35	1.0	CW	72	56	9.52	8.5	850
41-4-45A	45	1.4	ACW	82	56	7.93	7.15	865
41-4-45C	45	1.4	CW	82	56	7.93	7.15	865
41-4-75A	75	1.7	ACW	72	56	9.52	8.5	500
41-4-75C	75	1.7	CW	72	56	9.52	8.5	500

*41-4-18A is a totally enclosed motor.
Please note: for alternative mounting options - see pages 21-24

41 Range Motors

Radial Mount - 6 Pole (875 RPM)



Model No.	Watts (out)	Current (A)	Rotation (Shaft end)	Body Length	Shaft Dia (E)	Depth Across Flat	Mount (D)
41-6-12A	12	0.47	ACW	76.2	9.52	8.5	38.1
41-6-12C	12	0.47	CW	76.2	9.52	8.5	38.1
41-6-12A1	12	0.47	ACW	76.2	7.93	7.0	38.1
41-6-12C1	12	0.47	CW	76.2	7.93	7.0	38.1
41-6-21A	21	0.75	ACW	76.2	9.52	8.5	38.1
41-6-21C	21	0.75	CW	76.2	9.52	8.5	38.1
41-6-21A1	21	0.75	ACW	76.2	7.93	7.0	38.1
41-6-21C1	21	0.75	CW	76.2	7.93	7.0	38.1
41-6-25A	25	0.84	ACW	76.2	9.52	8.5	38.1
41-6-25C	25	0.84	CW	76.2	9.52	8.5	38.1
41-6-37A	37	1.00	ACW	89.0	9.52	8.5	44.5
41-6-37C	37	1.00	CW	89.0	9.52	8.5	44.5
41-6-37A1	37	1.00	ACW	89.0	7.93	7.0	44.5
41-6-37C1	37	1.00	CW	89.0	7.93	7.0	44.5
41-6-50A	50	1.70	ACW	102.0	9.52	8.5	51.0
41-6-50C	50	1.70	CW	102.0	9.52	8.5	51.0
41-6-50A1	50	1.70	ACW	102.0	7.93	7.0	51.0
41-6-50C1	50	1.70	CW	102.0	7.93	7.0	51.0
41-6-75A	75	2.10	ACW	102.0	9.52	8.5	51.0
41-6-75C	75	2.10	CW	102.0	9.52	8.5	51.0
41-6-75A1	75	2.10	ACW	102.0	7.93	7.0	51.0
41-6-75C1	75	2.10	CW	102.0	7.93	7.0	51.0

Please note: for alternative mounting options - see pages 21-24



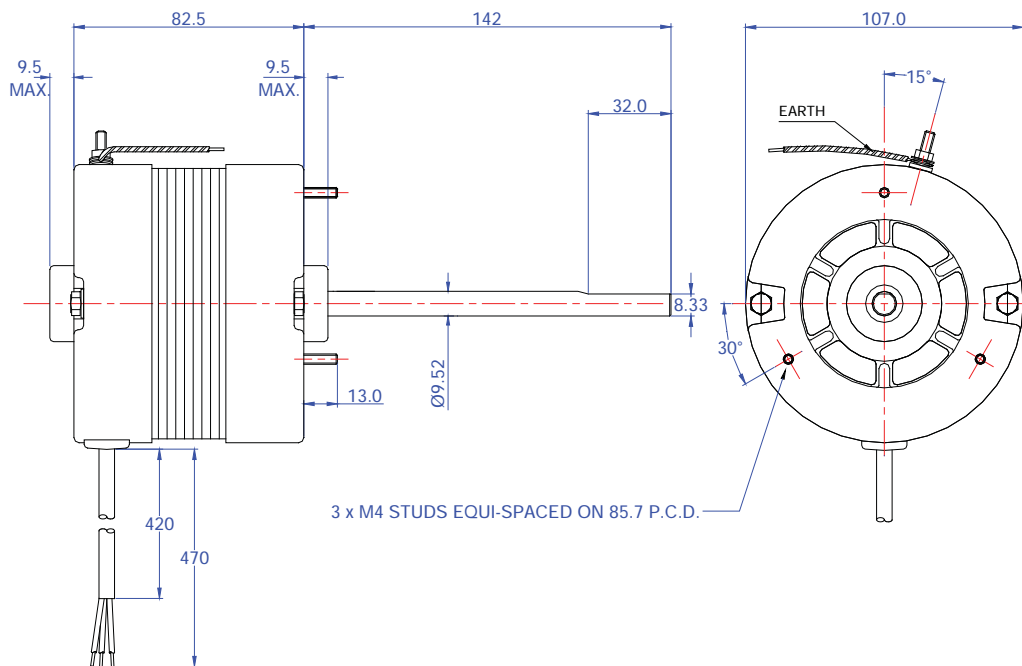
41 Range Motors

Endshield Mount - 4 Pole Single and Multi Speed Fan Motors



Features

- Run Speed - 1275 RPM
- Supply - 230V, 50Hz
- Totally Enclosed
- Sleeve Bearing
- Airstream Rated
- Thermal Overload Protection



Model No.	Watts (out)	Current (A)	No. of Speeds	Rotation (Shaft end)
41-4-10A	10	0.25	1	ACW
41-4-30A	30	0.45	1	ACW
41-4-30/3A	30	0.42/0.33/0.25	3	ACW

Please note: for alternative mounting options - see pages 21-24





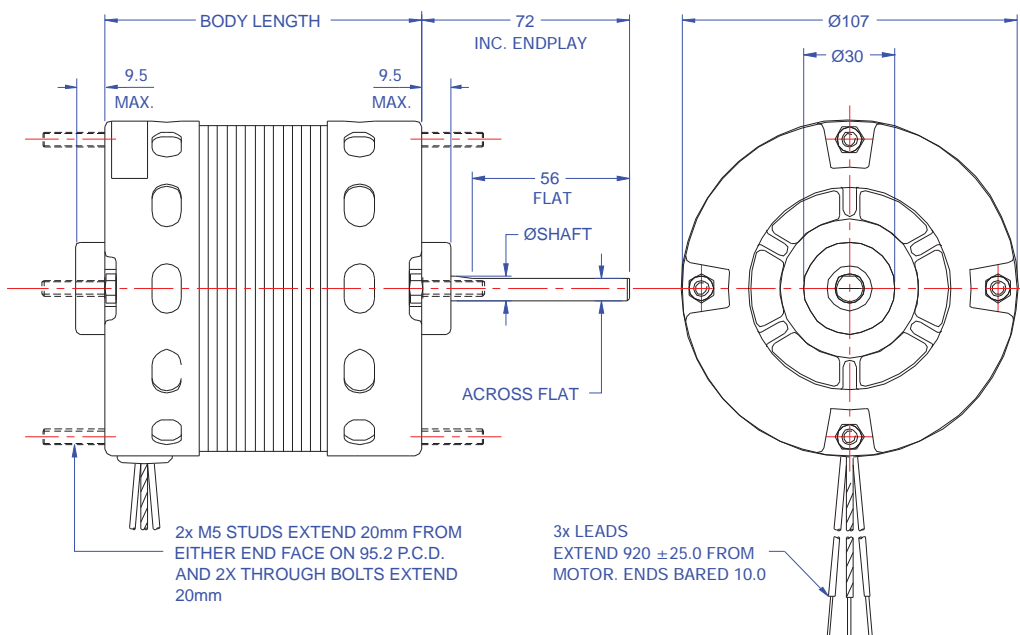
41 Range Motors

Casebolt Mounted Motors - 4 Pole (Drive end and non-drive end)



Features

- Run Speed - 1275 RPM
- Supply - see table below
- Ventilated Enclosure
- Sleeve Bearing
- Airstream Rated
- Thermal Overload Protection



Model No.	Volts (V)	Watts (out)	Current (A)	Mounts	Body Length	Shaft Ø (mm)	Across Flat (mm)	Rotation (Shaft end)
41-4-35A4	230V-50Hz	35	1.0	4 Studs NDE	89	9.52	8.5	ACW
41-4-35C4	230V-50Hz	35	1.0	4 Studs NDE	89	9.52	8.5	CW
41-4-50AHV	380/420V-50Hz	50	0.7	4 Studs DE	102	7.93	7.26	ACW
41-4-50CHV	380/420V-50Hz	50	0.7	4 Studs DE	102	7.93	7.26	CW

Please note: for alternative mounting options - see pages 21-24



41 Range Motors

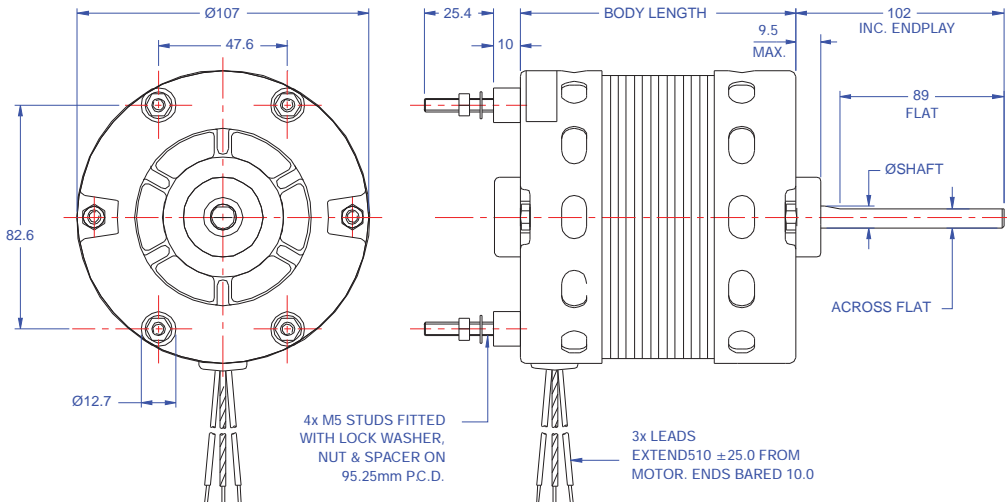
4 Stud - Non Drive End Mount. (Rectangular pattern)

6 Pole - Fan Motors



Features

- Run Speed - 875 RPM
- Supply - 230V, 50Hz
- Ventilated Enclosure
- Sleeve Bearing
- Airstream Rated
- Thermal Overload Protection



Model No.	Watts (out)	Current (A)	Rotation (Lead end)	Body Length	Shaft Ø (mm)	Shaft Flat (mm)
41-6-37AX	37	1.0	ACW	89	9.52	8.5
41-6-37CX	37	1.0	CW	89	9.52	8.5
41-6-37A1X	37	1.0	ACW	89	7.93	7.0
41-6-37C1X	37	1.0	CW	89	7.93	7.0
41-6-50AX	50	1.7	ACW	102	9.52	8.5
41-6-50CX	50	1.7	CW	102	9.52	8.5
41-6-50A1X	50	1.7	ACW	102	7.93	7.0
41-6-50C1X	50	1.7	CW	102	7.93	7.0
41-6-75A	75	2.1	ACW	102	9.52	8.5
41-6-75C	75	2.1	CW	102	9.52	8.5
41-6-75A1X	75	2.1	ACW	102	7.93	7.0
41-6-75C1X	75	2.1	CW	102	7.93	7.0

Please note: for alternative mounting options - see pages 21-24



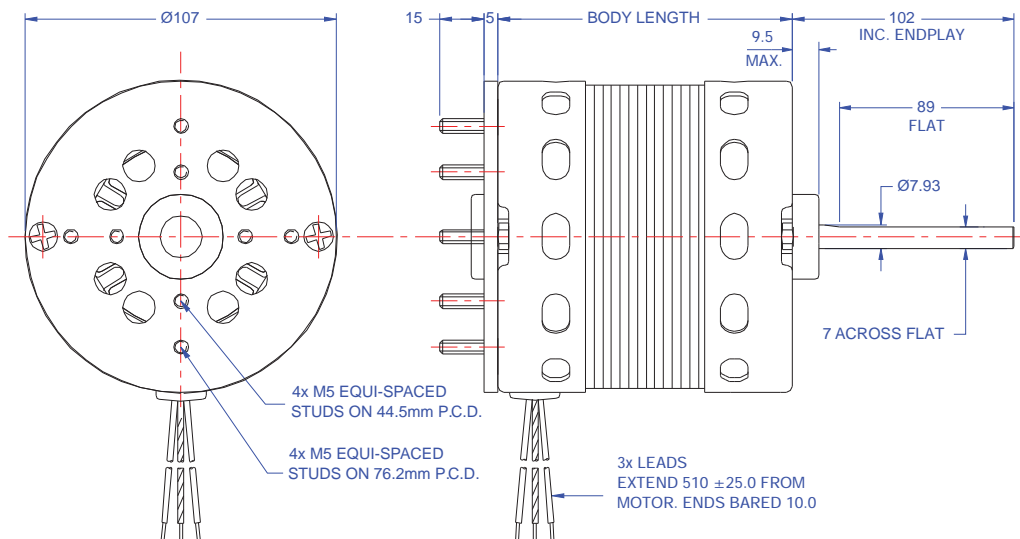
41 Range Motors

Rear (non drive end) mounting plate 6 Pole Fan Motors



Features

- Run Speed - 875 RPM
- Supply - 230V, 50Hz
- Ventilated Enclosure
- Sleeve Bearing
- Airstream Rated
- Thermal Overload Protection



Model No.	Watts (out)	Current (A)	Body Length	Rotation (Lead end)
41-6-40A1-BKT	40	1.1	89	ACW
41-6-40C1-BKT	40	1.1	89	CW
41-6-50A1-BKT	50	1.7	102	ACW
41-6-50C1-BKT	50	1.7	102	CW

Please note: for alternative mounting options - see pages 21-24



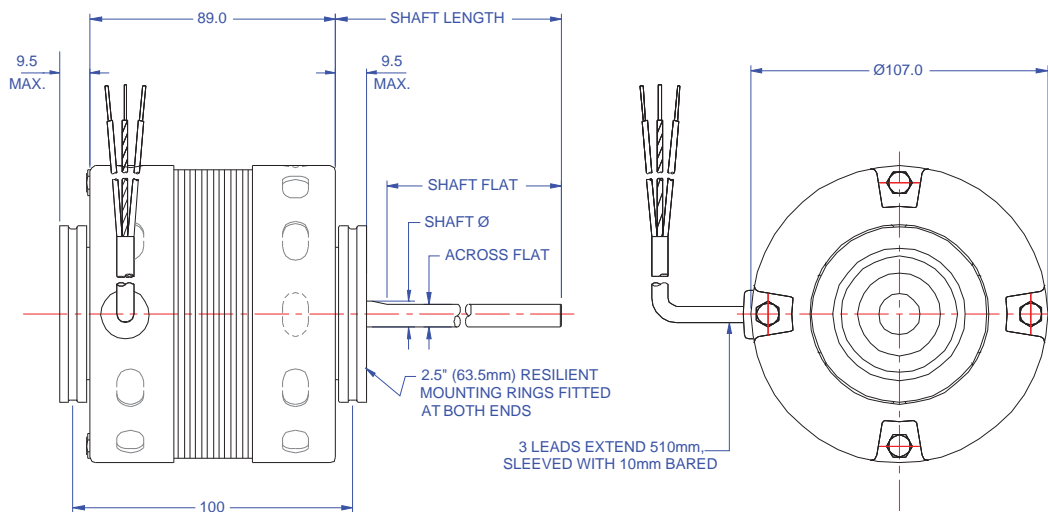
41 Range Motors

Resilient Ring Mount - 4 Pole Fan Coil Heater Motors



Features

- Run Speed - 1275 RPM
- Supply - 230V, 50Hz
- Enclosure - see table
- Sleeve Bearing
- Airstream Rated



Model No.	Watts (out)	Enclosure	Current (A)	Rotation (Lead end)	Shaft Ø (mm)	Shaft Length	Shaft Flat (mm)	Across Flat (mm)
41-4-9C	9	T.E.	0.60	CW	9.52	187	165	8.5
41-4-18A	18	T.E.	0.65	ACW	9.52	187	165	8.5
41-4-25AVF	25	VENT'D	0.70	ACW	8.0	46.5	30	7.0
41-4-25CVF	25	VENT'D	0.70	CW	8.0	46.5	30	7.0

Please note: for alternative mounting options - see pages 21-24

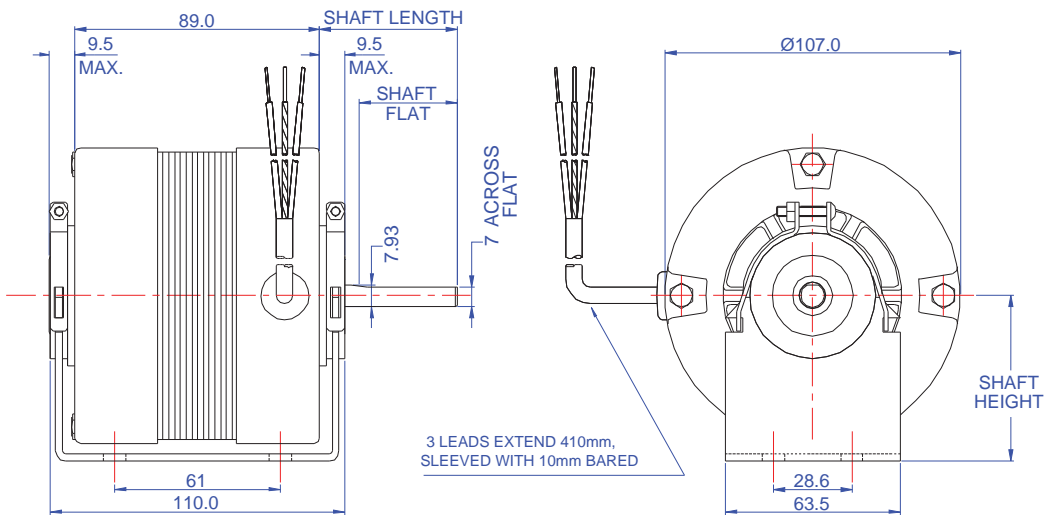
41 Range Motors

Resilient Base Mount - 4 Pole Evaporator Fan Motors



Features

- Run Speed - 1275 RPM
- Supply - 230V, 50Hz
- Totally Enclosed
- Sleeve Bearing
- Airstream Rated
- Thermal Overload Protection



Model No.	Watts (out)	Current (A)	Shaft Length (mm)	Shaft Flat (mm)	Shaft Height (mm)	Rotation (Shaft end)
* 41-4-9CB	9	0.60	187	165	66	CW
41-4-25A1	25	0.70	55	32.5	57	ACW

* 41-4-9CB is mounted on a wide profile base as shown on page 12
Please note: for alternative mounting options - see pages 21-24

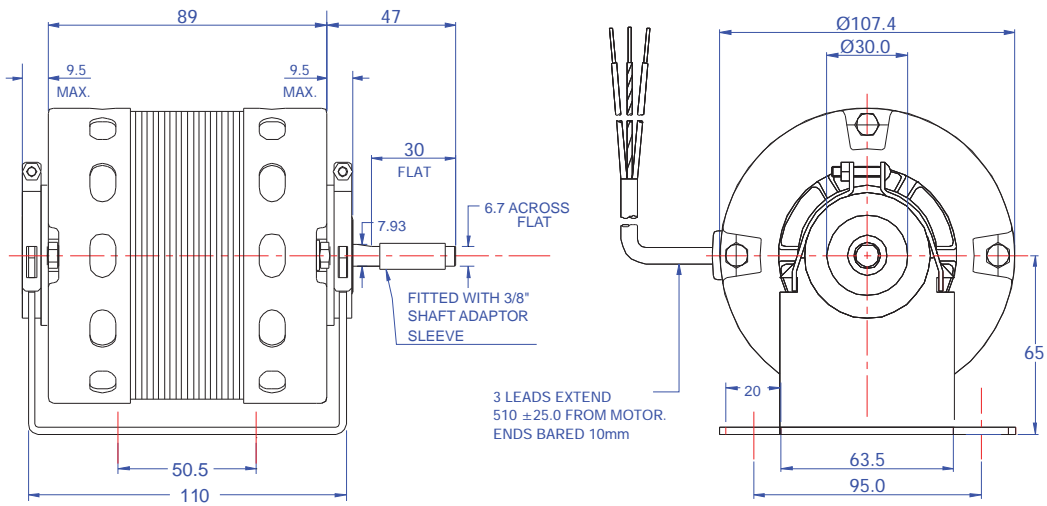
41 Range Motors

Resilient Base Mount - 4 Pole Continuous Mechanical Duty Motors



Features

- Run Speed - 1300 RPM
- Supply - 230V, 50Hz
- Ventilated Enclosure
- Sleeve Bearing
- Continuous Mechanical Duty
- Thermal Overload Protection
- Supplied with 3/8" Shaft Adaptor Sleeve



Model No.	Watts (out)	Current (A)	Rotation (Shaft end)
41-4-25AMR	25	0.60	ACW
41-4-25CMR	25	0.60	CW

Please note: for alternative mounting options - see pages 21-24

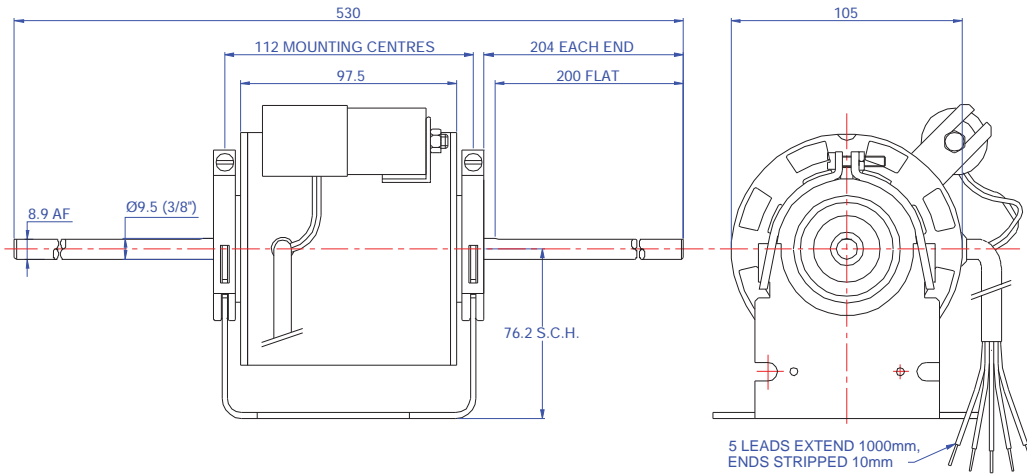
41 Range Motors

Former 41 Range Motors now re-modelled as 35 Range P.S.C.
 Resilient Base Mount - 4 Pole
 Double Shaft Fan Motors



Features

- Run Speed - 1275 RPM
- Supply - 230V, 50Hz
- Totally Enclosed
- Ball Bearing
- Airstream Rated
- Thermal Overload Protection



Old Model No.	New Model No.	Watts (out)	Current (A)	Rotation (Lead end)	Capacitor Supplied (uF)
41-4-45DSB	35-4-45DSB	45	0.35	ACW	2.5
41-4-55DSB	35-4-55DSB	55	0.45	ACW	2.5
41-4-80DSB	35-4-80DSB	80	0.50	ACW	4.0

Please note: for alternative mounting options - see pages 21-24

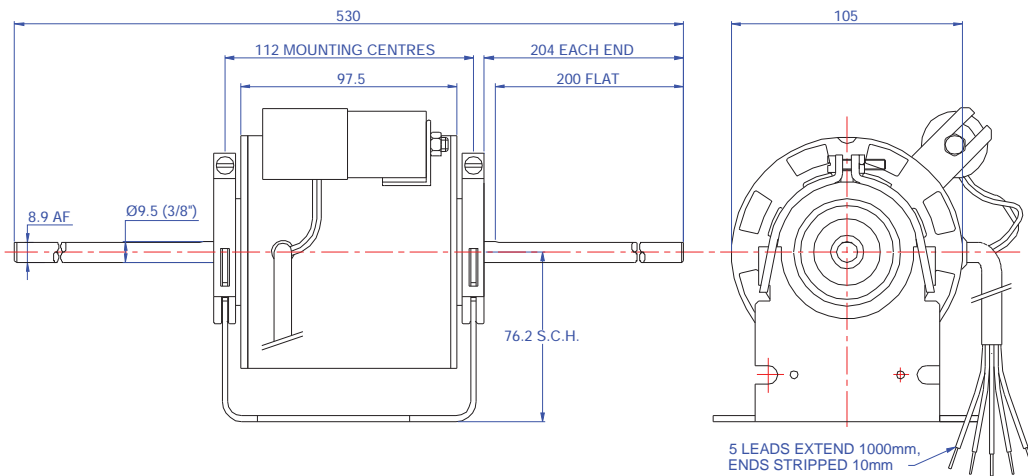
41 Range Motors

Former 41 Range Motors now re-modelled as 35 Range P.S.C.
 Resilient Base Mount - 6 Pole
 Double Shaft Fan Motors



Features

- Run Speed - 875 RPM
- Supply - 230, 50Hz
- Totally Enclosed
- Ball Bearing
- Airstream Rated
- Thermal Overload Protection



Old Model No.	New Model No.	Watts (out)	Current (A)	Rotation (Lead end)	Capacitor Supplied (uF)
41-6-15DS	35-6-15DS	15	0.35	ACW	2.5
41-6-37DS	35-6-37DS	37	0.40	ACW	2.5

Please note: for alternative mounting options - see pages 21-24

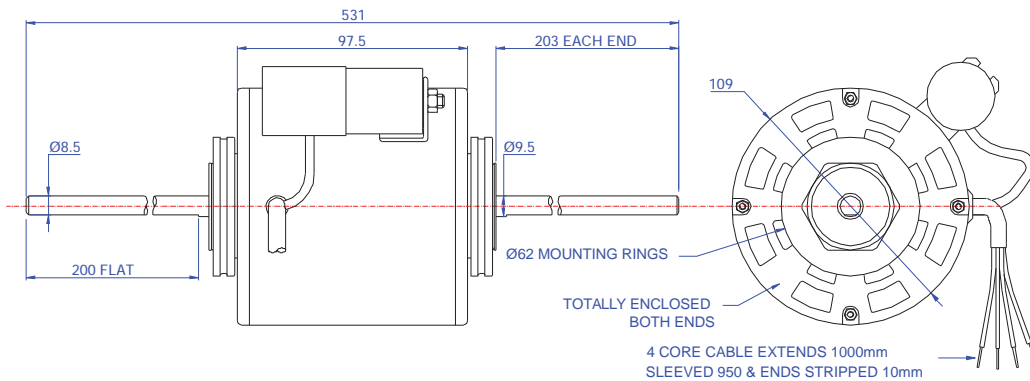
41 Range Motors

Former 41 Range Motors now re-modelled as 35 Range P.S.C.
 Resilient Ring Mount - 4 Pole
 Double Shaft Fan Motors



Features

- Run Speed - 1300 RPM
- Supply - 230V, 50Hz
- All models ACW Lead End
- Totally Enclosed
- Ball Bearing
- Airstream Rated
- Thermal Overload Protection



Old Model No.	New Model No.	Watts (out)	Current (A)	Rotation (Lead end)	Capacitor supplied (uF)
41-4-40DS	35-4-40DS	40	0.40	ACW	2.5
41-4-80DS	35-4-80DS	80	0.50	ACW	4.0

Please note: for alternative mounting options - see pages 21-24

41 Range Motors

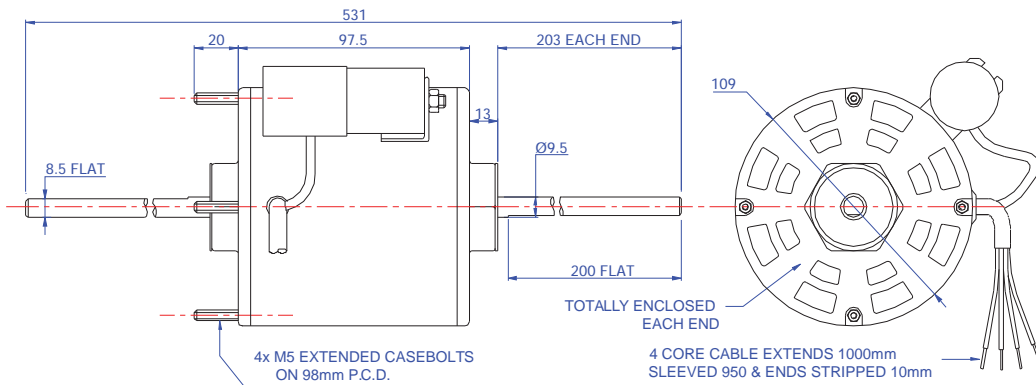
Former 41 Range Motors now re-modelled as 35 Range P.S.C.

4 Extended Bolts Mount - 4 Pole
Double Shaft Multi Speed Fan Motors



Features

- Run Speed - 1300 & 1050 RPM
- Supply - 230V, 50Hz
- Totally Enclosed
- Ball Bearing
- Airstream Rated
- Thermal Overload Protection



Old Model No.	New Model No.	Watts (out)	Current (A)	Rotation (Lead end)	Capacitor Supplied (uF)
41-4-50/2DS	35-4-50/2DS	50	0.45	ACW	2.5

This motor is supplied as standard with four extended studs for mounting at lead end. This model can also be supplied mounted on various styles of resilient base and via the body band described on pages 21-24

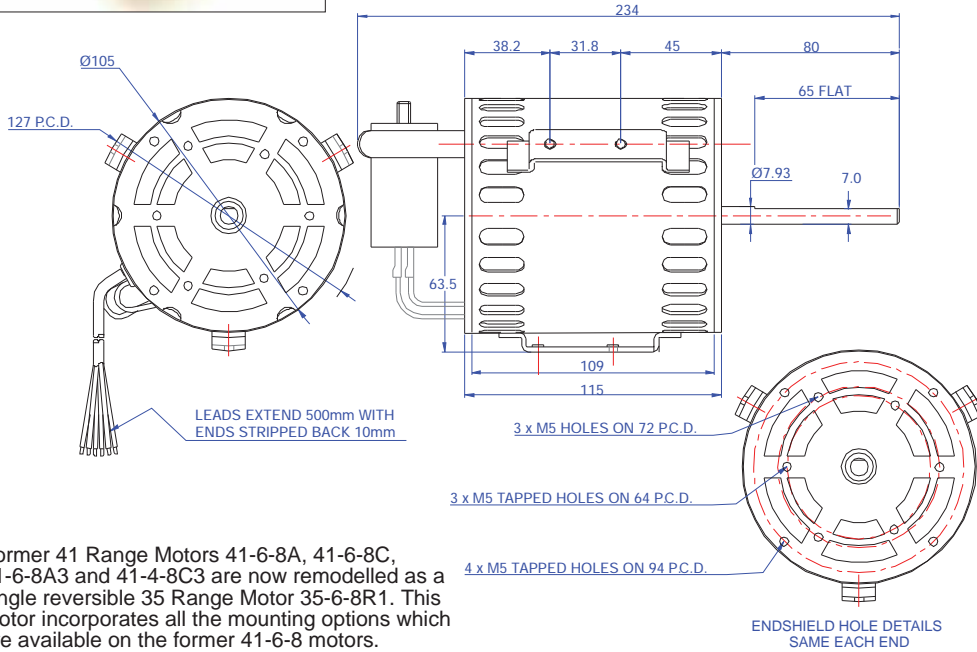
41 Range Motors

Former 41 Range Motors now re-modelled as 35 Range P.S.C.
Endshield Mount - 6 Pole
Fan Coil Motors



Features

- Run Speed - 900 RPM
- Supply - 230V, 50Hz
- Ventilated Enclosure
- Ball Bearing
- Airstream Rated
- Thermal Overload Protection



Former 41 Range Motors 41-6-8A, 41-6-8C, 41-6-8A3 and 41-4-8C3 are now remodelled as a single reversible 35 Range Motor 35-6-8R1. This motor incorporates all the mounting options which are available on the former 41-6-8 motors.

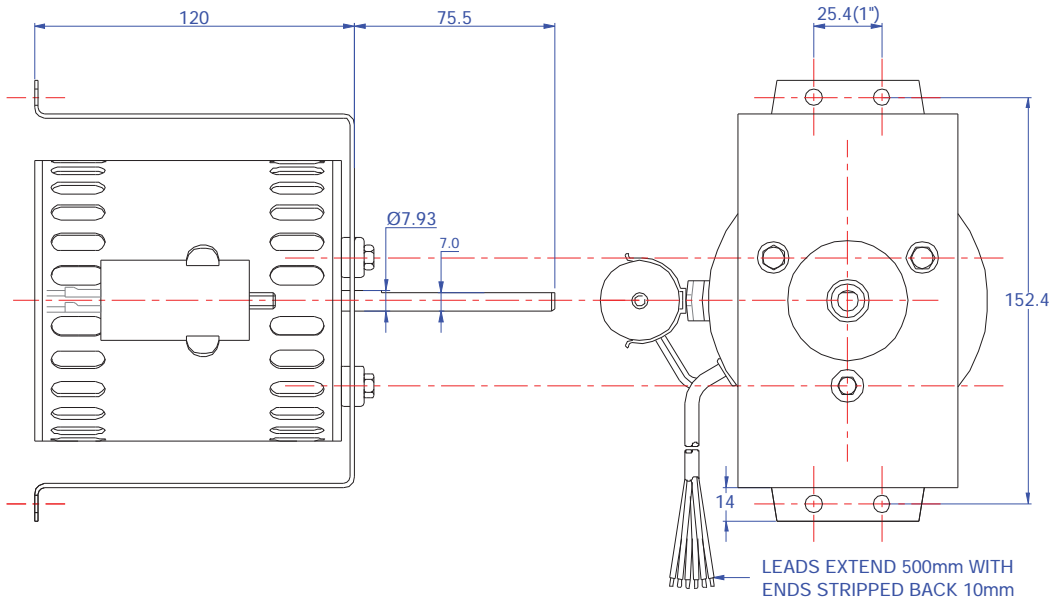
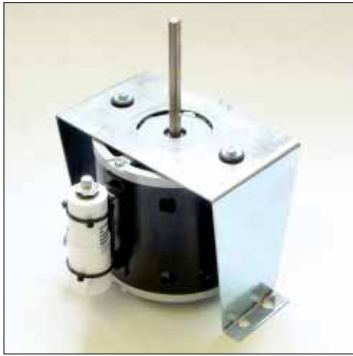
Old Model No.	New Model No.	Watts (out)	Current (A)	Rotation (Lead end)	Capacitor Supplied (uF)
41-6-8A 41-6-8C 41-6-8A3 41-6-8C3	35-6-8R1	8	0.17	Reversible	1.25

41 Range Motors

Former 41 Range Motors now re-modelled as 35 Range P.S.C.
 Bracket or Endshield Mount - 6 Pole
 Fan Motor

Features

- Run Speed - 900 RPM
- Supply - 230V, 50Hz
- Ventilated Enclosure
- Ball Bearing
- Airstream Rated
- Thermal Overload Protection



Old Model No.	New Model No.	Watts (out)	Current (A)	Rotation (Lead end)
41-6-8ABKT	35-6-8ABKT	8	0.17	ACW

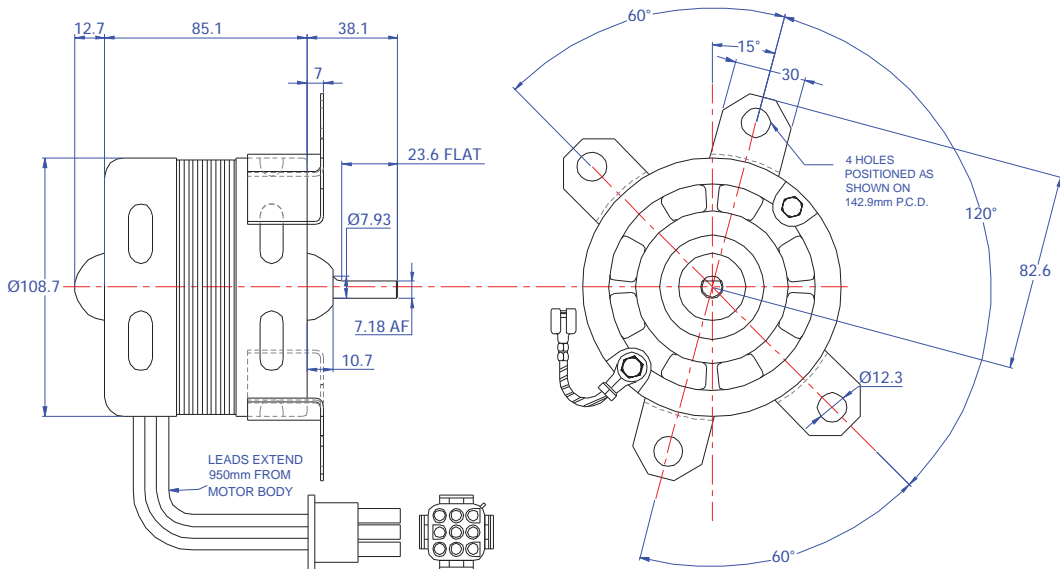
41 Range Motors

Air Conditioning Evaporator - Permanent Split Capacitor 5 Speed Motor- 4 Pole



Features

- Run Speed - 900 RPM Max
- Supply - 220-240V, 50/60Hz
- Ventilated Enclosure
- Sleeve Bearing
- Airstream Rated
- Thermal Overload Protection
- 5 Speed Winding

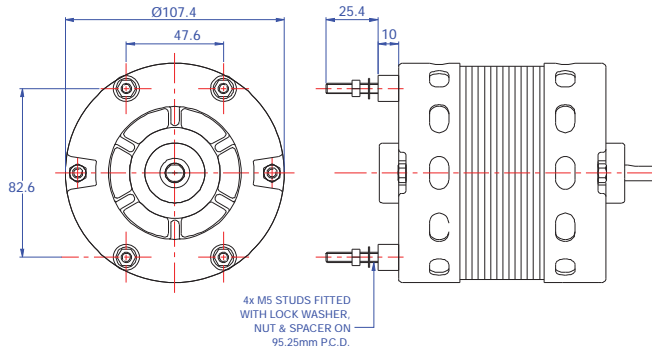


Model No.	Watts (out)	Current (A)	Rotation (Drive end)	Capacitor Supplied (uF)
41-4-38/5C	38	0.4 on High Speed	CW	3

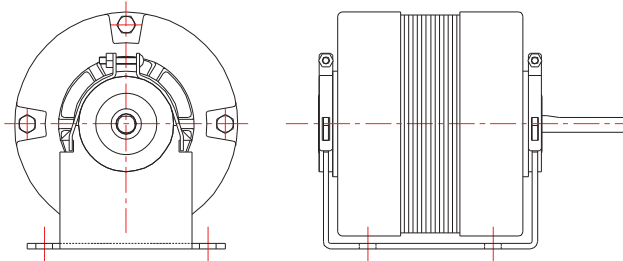
41 Range Motors

Mounting Options

Rectangular Pattern Mount

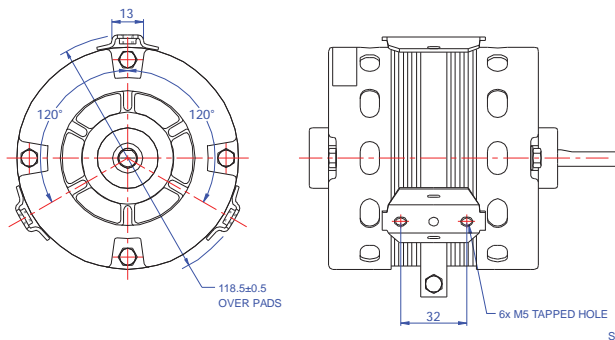


Resilient Base Mount



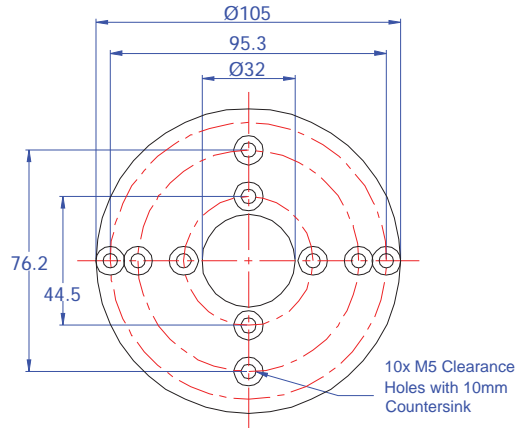
A variety of base configurations, both wide and narrow profiles and shaft centre heights are available

Compression Body Band / Radial Mount

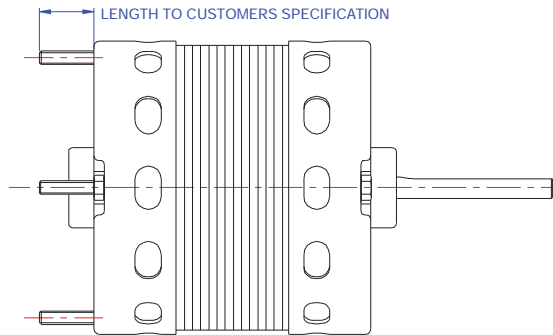




41 Range Motors 8 Stud Adaptor Plate

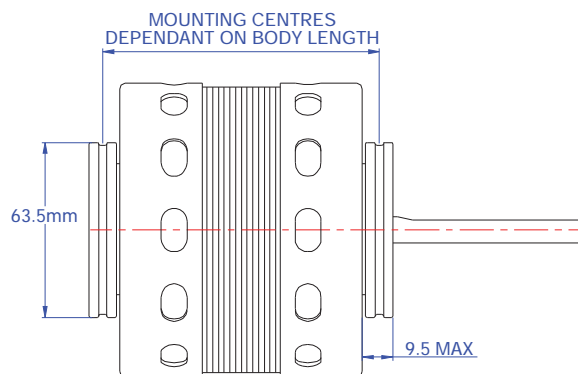
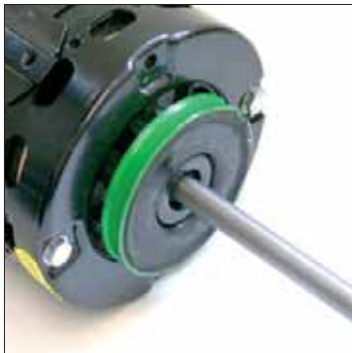


Extended Case Bolt Mount



The Motor Case Bolts may be extended at either Drive (Shaft) end or the Non-Drive end to give 4xM5 bolt fixings on 95.25 P.C.D.

Resilient Ring Mount

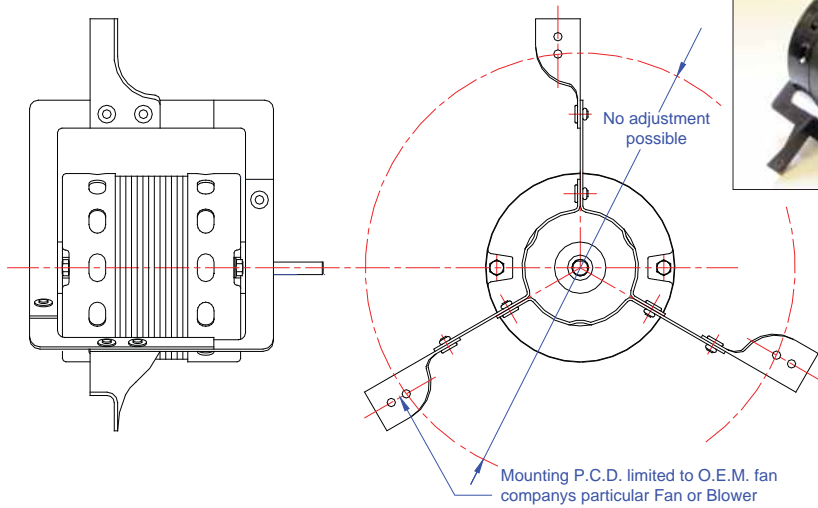


Resilient Rings may be used to mount motors onto an O.E.M. Cradle Base, or in conjunction with Remco Cradle Bases.

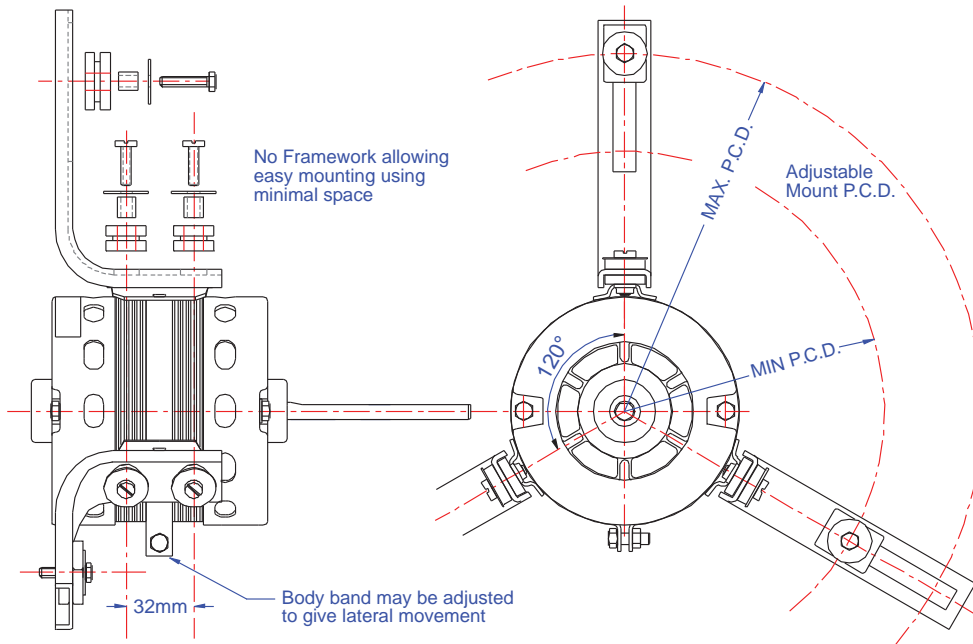


41 Range Motors

O.E.M. version non adjustable 'American style'
Mounting Bracket for Centrifugal Blowers



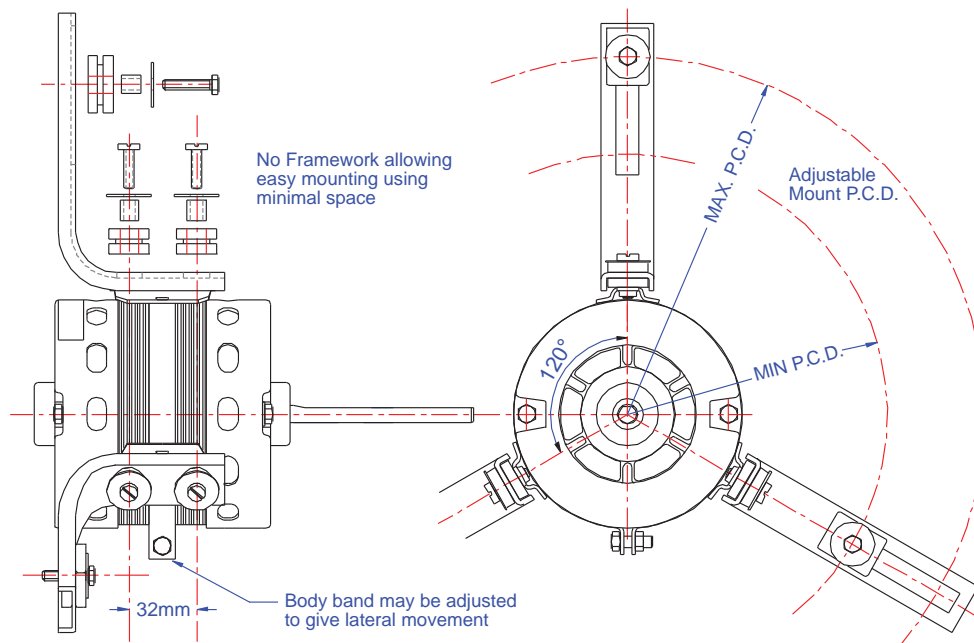
Replaced by Remco's Blower Mounting Kit - see page 24



41 Range Motors

All 41 range motors supplied with radial mountings, ie. compression body bands or pads welded to the motor casing may be used with 41 range blower mounting arms, which are used to mount the motor into a centrifugal fan casing.

	Standard Kit	Long Kit
Min. P.C.D.	190mm	242mm
Max. P.C.D.	252mm	334mm



Kit Includes

- 9x M5 Washers
- 3x M6 Washers
- 6x M6 Cheesehead Screws
- 3x M5 Mounting Bolts
- 3x M6 Mounting Bolts
- 3x Square Grommets
- 9x Round Grommets
- 9x M5 Spacers
- 3x M6 Spacers





41 Range Motors

Operation and Installation

Remco is an approved company to ISO9001:2008



Installation of motors must be carried out by a competent person. If you have any doubts about the suitability of a particular motor for an application, contact our technical department or seek local assistance from a qualified individual.

Most Remco motors are supplied with an earth lead. It is recommended that this is securely attached to a suitable earthing point within the appliance, even though the motor might be considered to have been earthed to the unit via its mounting studs.

It is particularly important that motors utilising resilient rubber mounting systems, i.e. radial mounting bands and blower mounting kits or resilient ring and base mountings are earthed correctly to an earthing point within the appliance via the earth lead from the motor, as the mounting methods described above effectively insulate the motor body from the appliance.

Always check that the mains supply voltage and frequency are suitable for the motor concerned - i.e. check the motor nameplate data.

Take care in connecting multi-speed motors to the mains supply. Incorrect connection will almost certainly damage the motor windings and may invalidate the warranty. All Remco multi-speed motors are supplied with a connection diagram on the motor body. Please read this carefully before switching on. To prevent short circuits and grounding always ensure any unused speed leads are properly insulated and isolated.

Take care in connecting electrically reversible motors used in certain centrifugal fan applications. In these applications if the motor is running in the wrong direction the unit will still blow air but only approximately 30% of the rated delivery. Check the handing of the fan wheel - see Fans & Fan Accessories Catalogue 01/05 before connecting the motor.

41 Range Motors

Contacts

Peter Robinson	Sales & Technical Enquiries	peter@remco.co.uk technical@remco.co.uk
George Burns	Sales & Technical Enquiries	george@remco.co.uk
Spencer Thomas	Sales & Technical Enquiries	spencer@remco.co.uk
Andrew Fenwick	Sales & Technical Enquiries	andrew@remco.co.uk
Jenny Robinson	Accounts / Statement Enquiries	jenny@remco.co.uk accounts @remco.co.uk
Judi Hammersley	Administrator / General Enquiries / New Accounts	judi@remco.co.uk
Malcolm Hoddinott	Sales Manager / External & Technical Sales	malcolm@remco.co.uk
Brendan Hills	Production Manager / Health & Safety / Purchasing	brendan@remco.co.uk
Joseph Somerville	Website Enquiries / Promotional Literature	joseph@remco.co.uk
Richard Godfrey	Quality ISO Representative / Goods Inwards / Warehouse Manager	richard@remco.co.uk
Adam Morter	Motor Test Technician	adam@remco.co.uk





41 Range Motors

Notes:



for detailed information and technical help please call Remco
or visit our Web Site - www.remco.co.uk



If you would like an electronic catalogue on CD-Rom containing details of our complete stock range please contact our sales office by phone or email.



tel: +44(0)1243 528414
fax: +44(0)1243 532127

email: sales@remco.co.uk
web: www.remco.co.uk