

WIRING DIAGRAMS - STANDARD MOTORS

These diagrams apply to **STANDARD FRAME INDUCTION MOTORS** which are used in the following products:-

| | | Pgs |
|----------------------|--|-------------|
| • AD/E..D/V | Alpha/Beta Series Diags. DD 4, 5, 6, 9 | D-4/6 |
| • AD/E..S | Alpha Series Supply Diags. DD 4, 5, 6, 9 | D-34/35 |
| • *AL.. | Centrifugal fans Diags. DD 1, 2, 3 | E-14/19 |
| • *AP/APV.. | Axial Flow fans Diags. DD 1, 2, 3, 8, 9 | B-29/31 |
| • *APB.. | Belt-driven axial fans Diags. DD 1, 2, 3, 7 | B-29/31 |
| • *APS.. | Belt-driven axial fans Diags. DD 1, 2, 3, 7, 8 | B-29/31 |
| • BFA.. | Bifurcated fans Diags. DD 1, 2, 3, 7, 8 | B-29/31 |
| • CGD/E.. | GE Series Diags. DD 1, 2, 3, 7, 8 | D-46/47 |
| • *CHD/E.. | Heritage Series Diags. DD 1, 2, 3, 7, 8 | D-18/19 |
| • *CHS.. | Heritage Smoke-Spill Diags. DD 1, 2, 3 | D-48/49 |
| • CPD/E.. | Compact 2000 Diags. DD 1, 4, 5, 6, 9 | A-12/14 |
| • *FAD.. | FA Series Diags. DD 1, 2, 3, 7 | D-20/25 |
| • *FL..BD | FlexLine Series Diags. DD 1, 2, 3, 7 | E-3, E-7/11 |
| • *FL..DD | FlexLine Series Diags. DD 1, 2, 3, 7 | E-3/6 |
| • *HC.. | High Capacity Series Diags. DD 1, 2, 3, 7, 8 | D-26/27 |
| • JV.. | JetVent Axial Diags. DD 1, 3 | F-12/13 |
| • All other JetVents | See page M-9 | |
| • *L.. | Centrifugal fans Diags. DD 1, 2, 3 | E-14/19 |
| • *MMD/E.. | Multiflow Series Diags. DD 1, 2, 3, 6, 8 | B-20/24 |
| • *PC..DD | PowerLine Series Diags. DD 1, 2, 3, 8, 9 | B-16/18 |
| • *RDE.. | New Generation Series Diags. DD 1, 2, 3, 8 | D-10/13 |
| • *RDLE.. | Alpha/Beta Industrial Diags. DD 1, 2, 3, 8 | D-7/9 |
| • *RDS.. | New Generation Series Diags. DD 1, 2, 3, 8 | D-10/13 |
| • RSS.. | New Generation Series Diags. DD 1, 2, 3 | D-10/13 |
| • *RVE.. | New Generation Series Diags. DD 1, 2, 3, 8 | D-10/13 |
| • *RVLE.. | Alpha/Beta Industrial Diags. DD 1, 2, 3, 8 | D-7/9 |
| • SCD/E... | Short Cased Series Diags. DD 4, 5, 6, 9 | B-14/15 |
| • *SQ.. | SQ Series Diags. DD 1, 2, 3, 8 | A-15/17 |
| • SS.. | Smoke-Spill Series Diags. DD 1, 2, 3 | D-26/27 |

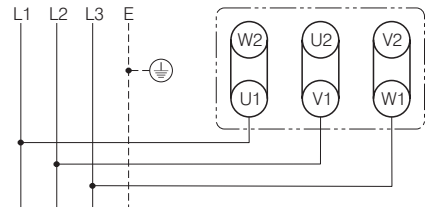
3Ø WIRING DIAGRAMS

Diagram DD1

SINGLE SPEED MOTORS

refer to the name plate data for correct connection

For delta (Δ) wired motors



For star (Y) wired motors

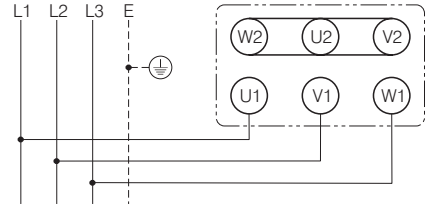
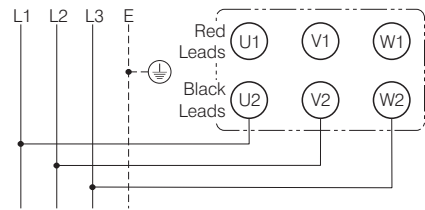


Diagram DD2

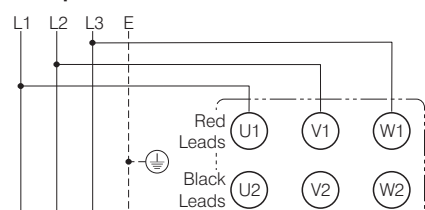
TWO-SPEED MOTORS

with 2 separate windings (dual winding)

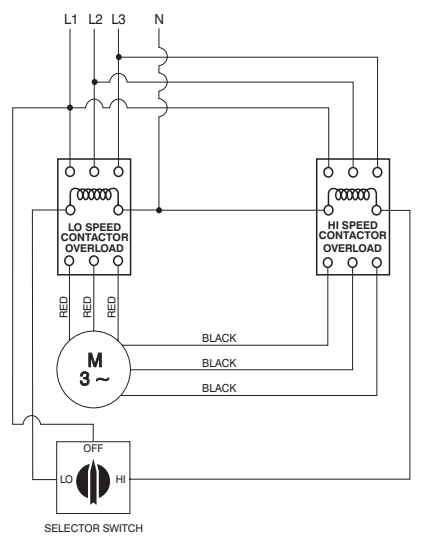
High speed



Low speed



Suggested wiring arrangement



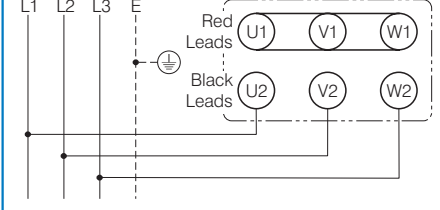
3Ø WIRING DIAGRAMS

Diagram DD3

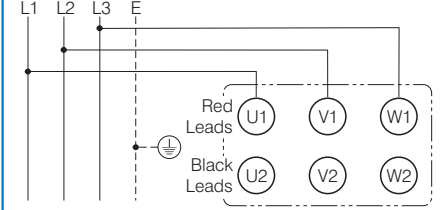
TWO-SPEED MOTORS

in Dahlander connection (tapped winding)

High speed



Low speed



Suggested wiring arrangement

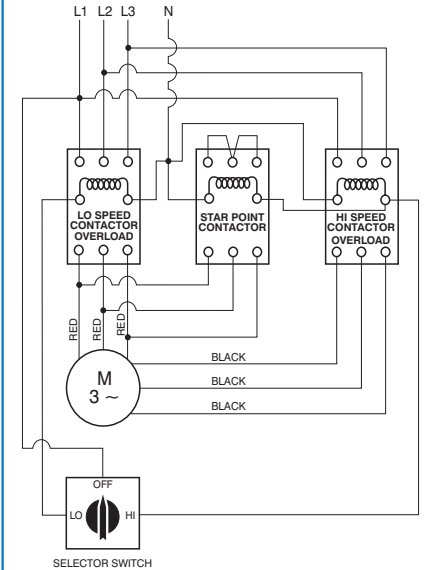
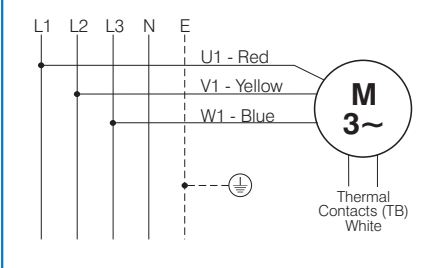


Diagram DD4

Single speed only

Codes: ..31. and ..35.



***NOTE:** Refer to the motor manufacturer's data on the motor for wiring diagrams on standard frame Ex e, Ex d etc. motors.

These diagrams are current at the time of publication, check the wiring diagram supplied with the motor.

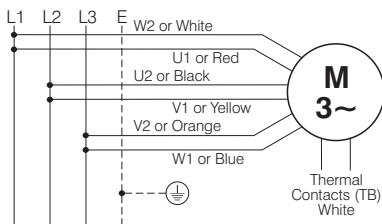
3Ø WIRING DIAGRAMS

Diagram DD5

TWO-SPEED MOTORS

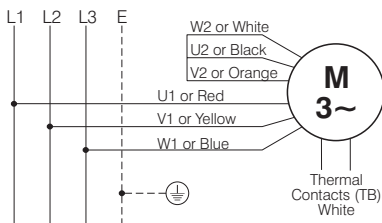
High speed delta (Δ) connection

Codes: ..40. to 63.



Low speed star (Y) connection

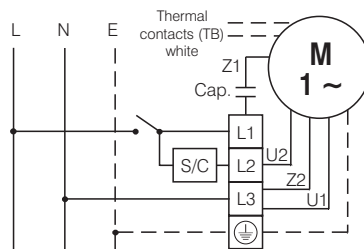
Codes: ..40. and upwards



1Ø WIRING DIAGRAMS

Diagram DD6

Anti-Clockwise

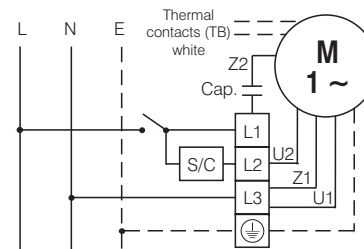


Z2 - Yellow Z1 - Blue
U2 - Black U1 - Red
Bridge L1 and L2 if speed controller (S/C) is not required

1Ø WIRING DIAGRAMS

Diagram DD9

Clockwise



Z2 - Yellow Z1 - Blue
U2 - Black U1 - Red
Bridge L1 and L2 if speed controller (S/C) is not required

Diagram DD7

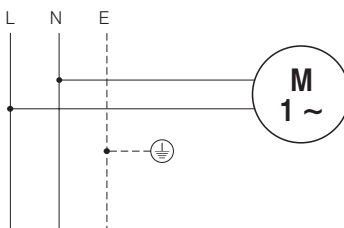
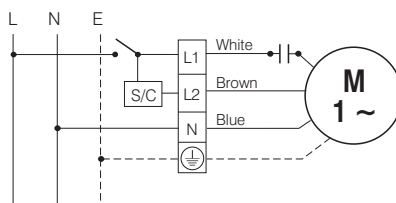


Diagram DD8



Bridge L1 and L2 if speed controller (S/C) is not required

For all other SINGLE-PHASE wiring diagrams refer to the manufacturers data on the motor.

These diagrams are current at the time of publication, check the wiring diagram supplied with the motor.



WIRING DIAGRAMS - EXTERNAL ROTOR MOTORS

These diagrams mainly apply to **EXTERNAL ROTOR MOTORS** but some standard frame induction motor diagrams have been included for ease of presentation.

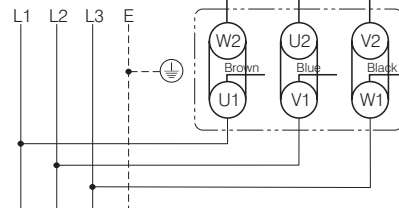
| | | Pgs |
|-------------|-------------------------|---------|
| • CD/E..D/V | Gamma Series | D-14/17 |
| | Diags. ER 1, 2, 4, 5 | |
| • CD/E..VGL | GL Gamma Series | D-43/45 |
| | Diags. ER 1, 2, 4, 5 | D-57/59 |
| • CD/E..S | Gamma Supply Series | D-36/37 |
| | Diags. ER 1, 2, 4, 5 | |
| • CF.. | Compact axial fans | B-3 |
| | Single-phase motors | |
| | Diag. ER 6 | |
| • EDM.. | EDM Series | A-2 |
| | Diags. ER 6, 7 | |
| • EN.. | EN Series | A-3 |
| | Diag. ER 6 | |
| • FL..ER | FlexLine Series | E-3/6 |
| | Diags. ER 1, 2, 4, 5 | |
| • FP.. | Compact F/Proof Series | F-3/7 |
| | Diag. ER 6 | |
| • FSU.. | Filtered Supply Unit | A-25 |
| | Series 1; AC motors | |
| | Diag. ER 4 | |
| • FSU146 | | See M-9 |
| • GRE.. | Sigma Series | E-2 |
| | Diag. ER 4 | |
| • HB.. | Header Box | A-24 |
| | Diag. ER 4 | |
| • HCM... | HCM Series | A-6 |
| | Diag. ER 4 | |
| • HV.. | Stylvent Series | A-8/9 |
| | Diags. ER 6, 8 | |
| • HXM.. | HXM Series | A-11 |
| | Diag. ER 6 | |
| • MT.. | Minitube Series | B-12/13 |
| | Diags. ER 4, 6 | |
| • MV.. | Minivent Series | D-2/3 |
| | Diags. ER 4, 6 | D-34/35 |
| • PC..ER | PowerLine Series | B-16/18 |
| | Diags. ER 1, 2, 3, 4, 5 | |
| • PF.. | Profile Fan Series | D-28/29 |
| | Diag. ER 4 | |
| • RP.. | Ring Plate Series | A-4/5 |
| | Diag. ER 4 | |
| • TILD/E.. | Twin Neta Series | B-26/27 |
| | Diags. ER 1, 2, 4, 5 | |
| • VM.. | VentMajor Series | B-4/5 |
| | Diag. ER 6 | |
| • VRP.. | Ring Plate Series | A-4/5 |
| | Diag. ER 4 | |
| • WCD/E.. | Delta Series | A-22/23 |
| | Diags. ER 1, 2, 4, 5 | |
| • TWCD/E.. | Delta Series, Twin fan | A-22/23 |
| | Diags. ER 1, 2, 4, 5 | |

3Ø WIRING DIAGRAMS

Diagram ER1

TWO-SPEED MOTORS

High speed



Low speed

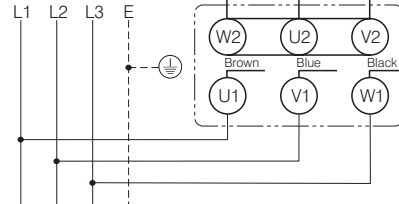
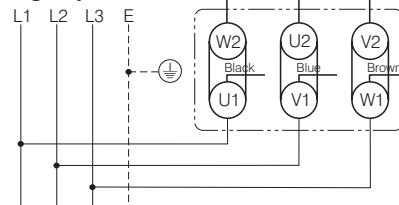


Diagram ER2

TWO-SPEED MOTORS

High speed



Low speed

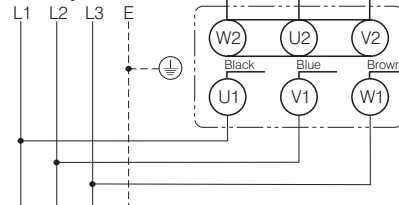
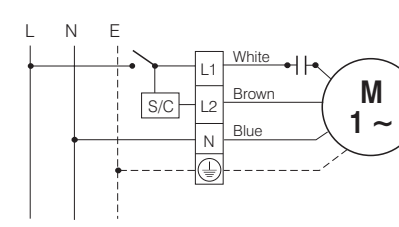


Diagram ER3

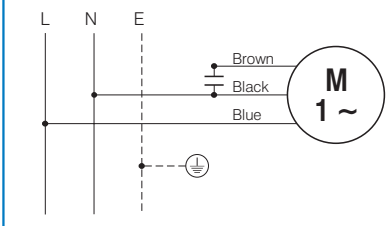


Bridge L1 and L2 if speed controller (S/C) is not required

1Ø WIRING DIAGRAMS

Diagram ER4

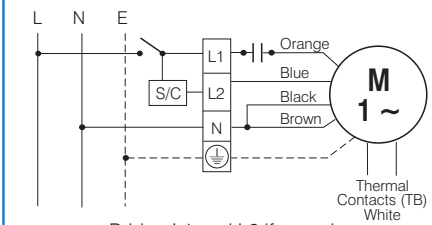
3 active wires plus auto-reset thermal contacts



Codes: CE19.. to CE40.. + other fans as shown

Diagram ER5

4 active wires plus manual-reset thermal contacts



Bridge L1 and L2 if speed controller (S/C) is not required

Codes: CE45.. and over + other fans as shown

Diagram ER6

Codes: EDM..S & ..C; HV-150AE; MT132; MV112 & MV132

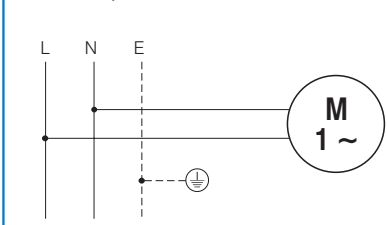


Diagram ER7

Codes: EDM..CT & ..CR

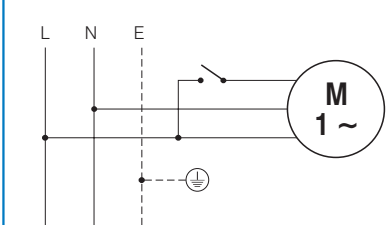
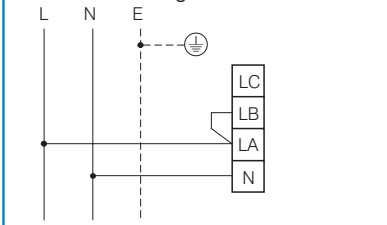


Diagram ER8

Codes: HV-230AE & HV-300AE

Exhaust air mode. For supply air mode bridge LC & LA



These diagrams are current at the time of publication, check the wiring diagram supplied with the motor.

WIRING DIAGRAMS - ER & INTELLIGENT MOTORS

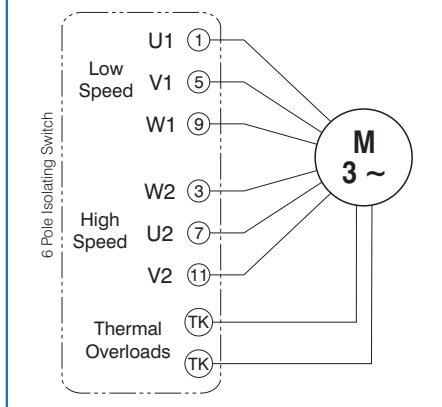
These diagrams apply to **EXTERNAL ROTOR MOTORS** that are fitted to the following products:-

| | | Pgs |
|-------------------|--|--------------|
| • EIE.. | Ezifit In-Wall Diag. ER 11 | A-18/19 |
| • FSU146 | Filtered Supply Units Series 3 Diag. ER 12 | A-26 |
| • Other FSU units | | See page M-8 |
| • JISU.. | JetVent Centrifugal Diag. ER 9 | F-15 |
| • JIU.. | JetVent Multiflow Diag. ER 9 | F-14 |
| • JV.. | JetVent Axial | See page M-6 |
| • JWV.. | JetVent Warehouse Diag. ER 9 | G-5 |
| • TD.. | Mixvent Series Diag. ER 10 | B-6/9 |
| • WJ.. | WhisperJet Fan Kit Diag. ER 10 | B-32/33 |

3Ø WIRING DIAGRAMS

Diagram ER9

TWO SPEED STAR/DELTA MOTOR



1Ø WIRING DIAGRAMS

Diagram ER10

Codes: All Mixvent units

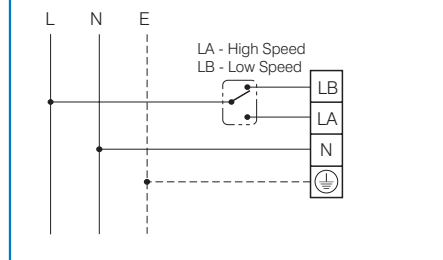


Diagram ER11

Codes: EIE150

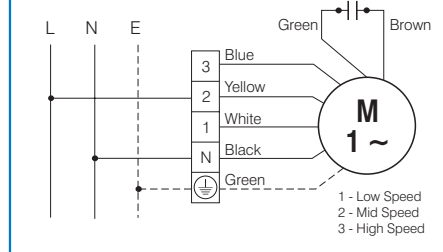
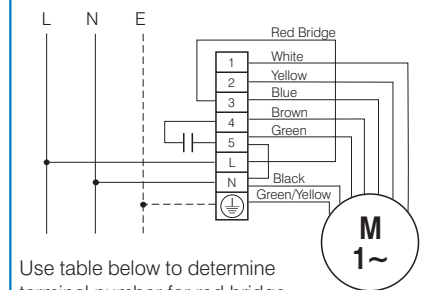


Diagram ER12

Codes: FSU146-4-A1



Use table below to determine terminal number for red bridge

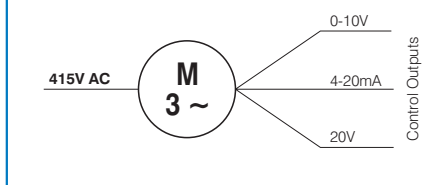
| Air Flow, L/sec | 109 | 166 | 199 |
|--------------------|-----|-----|------|
| Speed | Low | Med | High |
| Terminal | 1 | 2 | 3 |

These diagrams apply to **INTELLIGENT CONTROL MOTORS** that are fitted to the following products:-

| | | Pgs |
|------------|----------------------------------|---------|
| • CD/EEC.. | Gamma EC Diags. IC1, 2 | D-50/51 |
| • CD/EEC.. | VGLGL Gamma EC Diags. IC1, 2 | D-52/53 |
| • ESAP | Eco-Speed Axial Diag. IC3 | B-39/42 |
| • ESPCE | Eco-Speed PowerLine Diag. IC3 | B-36/38 |
| • PCD/EEC | PowerLine EC Diags. IC1, 2 | B-34/35 |

3Ø WIRING DIAGRAMS

Diagram IC1



1Ø WIRING DIAGRAMS

Diagram IC2

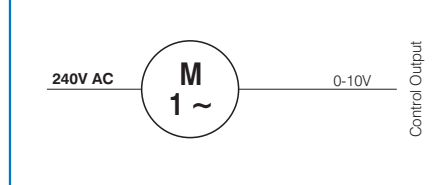
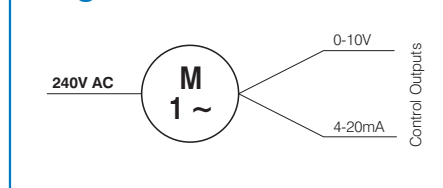


Diagram IC3



These diagrams are current at the time of publication, check the wiring diagram supplied with the motor.