

# 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	D-4/6
	Diags. DD 4, 5, 6, 7	
• AD/E..S	Alpha Series Supply	D-13/15
	Diags. DD 4, 5, 6, 7	
• *AL..	Centrifugal fans	E-10/15
	Diags. DD 1, 2, 3	
• *AP/APV..	Axial Flow fans	B-50/53
	Diags. DD 1, 2, 3, 6, 7, 9	
• *APB..	Belt-driven axial fans	B-50/53
	Diags. DD 1, 2, 3, 6, 7, 9	
• *APS..	Belt-driven axial fans	B-50/53
	Diags. DD 1, 2, 3, 6, 7, 9	
• BFA..	Bifurcated fans	B-50/53
	Diags. DD 1, 2, 3, 6, 7, 9	
• CGD/E..	GE Series	D-58/59
	Diags. DD 1, 2, 3, 8, 9	
• *CHD/E..	Heritage Series	D-48/49
	Diags. DD 1, 2, 3, 8, 9	
• *CHS..	Heritage Smoke-Spill	D-50/51
	Diags. DD 1, 2, 3	
• CPD/E..	Compact 2000	A-16/18
	Diags. DD 1, 4, 5, 6, 7	
• *FL..DD	FlexLine Series	E-3/6
	Diags. DD 1, 2, 3	
• FP..	Compact F/Proof Series	A-26/27
	Diag. DD 8	
• *HC..	High Capacity Series	D-60/62
	Diags. DD 1, 2, 3	
• JV..	JetVent Axial	F-4/5
	Diags. DD 1, 2, 3	
• *MMD/E..	Multiflow Series	B-42/46
	Diags. DD 1, 2, 3, 5, 6, 9	
• *PCD/E..	PowerLine Series	B-34/36
	Diags. DD 1, 2, 3, 7, 9	
• *RDE..	New Generation Series	D-16/19
	Diags. DD 1, 2, 3, 9	
• *RDLE..	Alpha/Beta Industrial	D-7/9
	Diags. DD 1, 2, 3, 9	
• *RDS..	New Generation Series	D-16/19
	Diags. DD 1, 2, 3, 9	
• RSS..	New Generation Series	D-16/19
	Diags. DD 1, 2, 3, 9	
• *RVE..	New Generation Series	D-16/19
	Diags. DD 1, 2, 3, 9	
• *RVLE..	Alpha/Beta Industrial	D-7/9
	Diags. DD 1, 2, 3, 9	
• SCD/E..	Short Cased Series	B-26/27
	Diags. DD 4, 5, 6, 7	
• *SQ..	SQ Series	A-23/25
	Diags. DD 1, 2, 3, 9	
• SS..	Smoke-Spill Series	D-60/62
	Diags. DD 1, 2, 3	

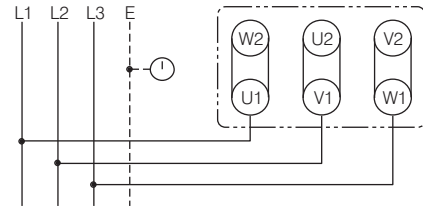
## 3Ø WIRING DIAGRAMS

### Diagram DD1

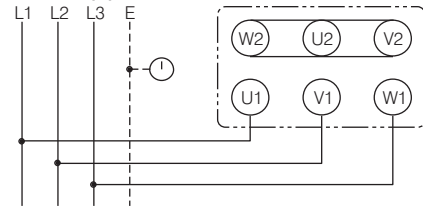
#### SINGLE SPEED MOTORS

refer to the name plate data for correct connection

##### For delta (Δ) wired motors



##### For star (Y) wired motors

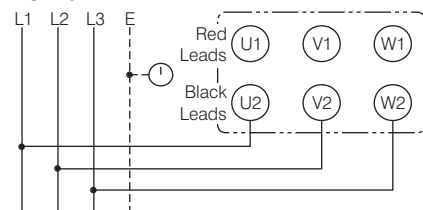


### Diagram DD2

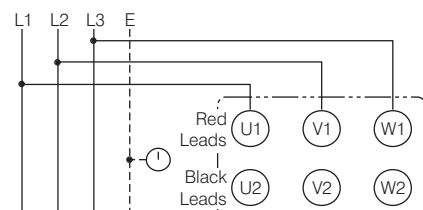
#### TWO-SPEED MOTORS

with 2 separate windings (dual winding)

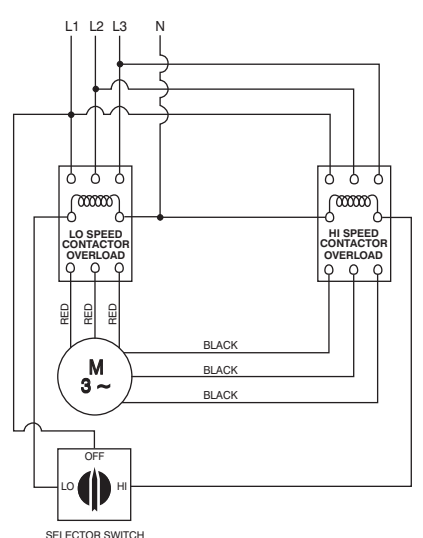
##### High speed



##### Low speed



##### Suggested wiring arrangement



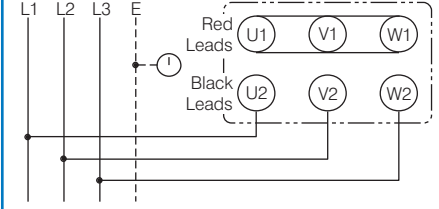
## 3Ø WIRING DIAGRAMS

### Diagram DD3

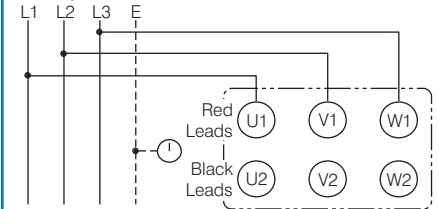
#### TWO-SPEED MOTORS

in Dahlander connection (tapped winding)

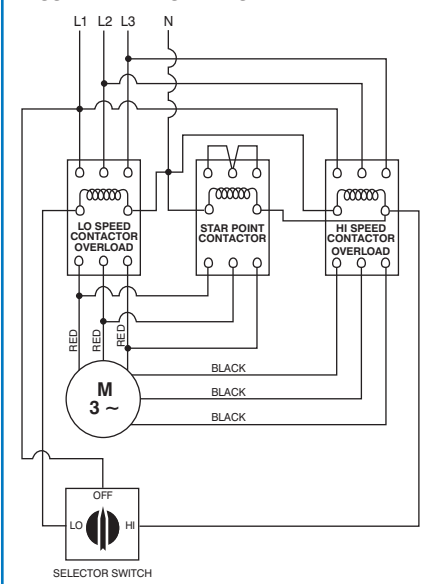
##### High speed



##### Low speed



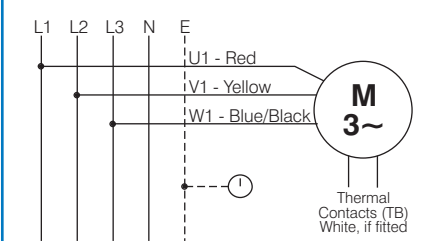
##### Suggested wiring arrangement



### 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.

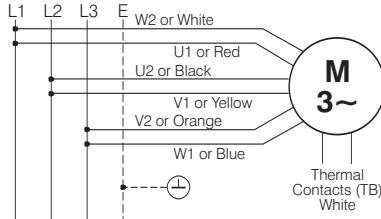
## 3Ø WIRING DIAGRAMS

### Diagram DD5

#### TWO-SPEED MOTORS

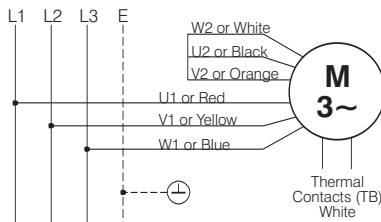
#### High speed delta ( $\Delta$ ) connection

Codes: ..40. to 63.



#### Low speed star ( $\gamma$ ) connection

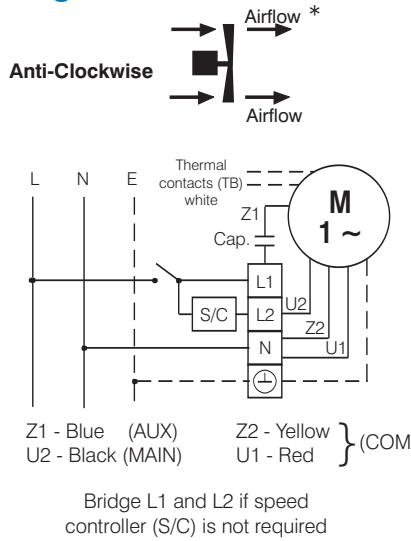
Codes: ..40. and upwards



## 1Ø WIRING DIAGRAMS

### (Form A)

### Diagram DD6

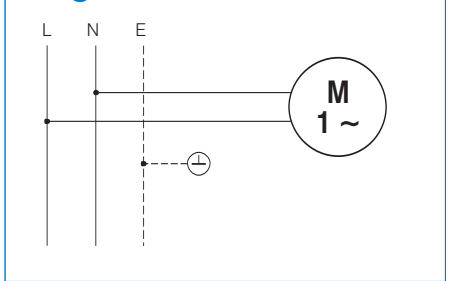


Note:  
This diagram suits speed controllers, VA2.0 and VA2.8 only. When using the AVA5.0, VA5.0 and VA8.0 speed controllers, use the AUX, MAIN and COM connections.

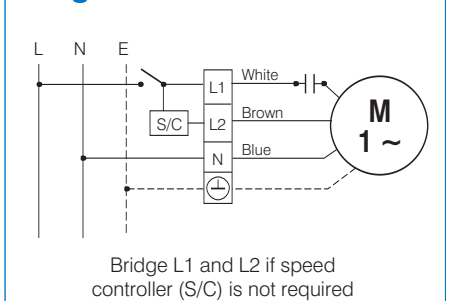
\* Airflow direction base on left-hand blade installation.

## 1Ø WIRING DIAGRAMS

### Diagram DD8



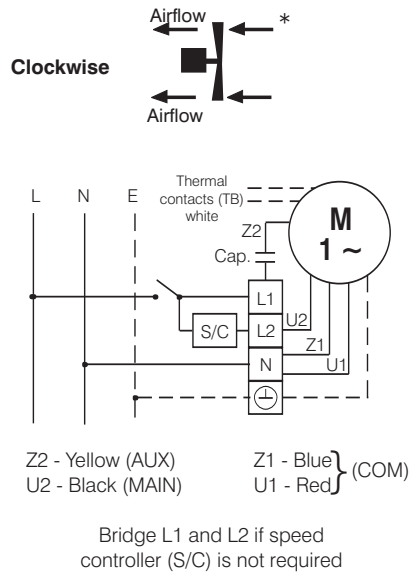
### Diagram DD9



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

## (Form B)

### Diagram DD7



Note:  
This diagram suits speed controllers, VA2.0 and VA2.8 only. When using the AVA5.0, VA5.0 and VA8.0 speed controllers, use the AUX, MAIN and COM connections.

\* Airflow direction base on left-hand blade installation.

# 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.

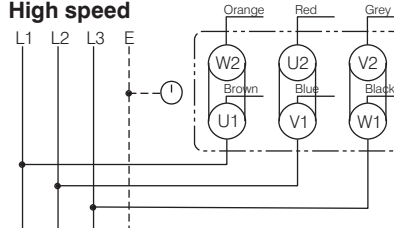
		Pgs
• CD/E..D/V	Gamma Series	D-22/25
	Diags. ER 1, 2, 4, 5	
• CD/E..VGL	GL Gamma Series	D-38/40
	Diags. ER 1, 2, 4, 5	
• CD/E..S	Gamma Supply Series	D-32/33
	Diags. ER 1, 2, 4, 5	
• CF..	Compact axial fans	B-3
	Single-phase motors	
	Diag. ER 6	
• EDM..	EDM Series	A-4/5
	Diags. ER 6, 7	
• FSU146	Diag. ER 11	A-32
• GRE..	Sigma Series	E-2
	Diag. ER 4	
• HB..	Header Box	A-33
	Diag. ER 4	
• HCM...	HCM Series	A-10/11
	Diag. ER 4	
• HV..	Stylvent Series	A-12/13
	Diags. ER 6, 8	
• HXM..	HXM Series	A-15
	Diag. ER 6	
• MT..	Minitube Series	B-24/25
	Diags. ER 4, 6	
• MV..E	Minivent Exhaust Series	D-2/3
	Diags. ER 4, 6	
• MV..S	Minivent Supply Series	D-13/15
	Diags. ER 4, 6	
• PC..ER	PowerLine Series	B-34/36
	Diags. ER 1, 2, 3, 4, 5	
• RP..	Ring Plate Series	A-8/9
	Diag. ER 4	
• VM..	VentMajor Series	B-4/5
	Diag. ER 6	
• SILDES	Silent Design Series	A-2/3
	Diag. ER 6	
• EWE	Ezifit Thru Wall	A-30/31
	Diag. ER 4	

## 3Ø WIRING DIAGRAMS

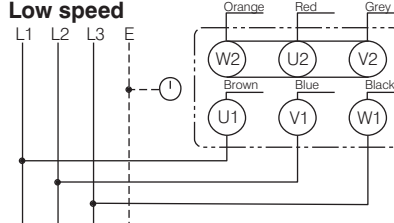
### Diagram ER1

#### TWO-SPEED MOTORS

##### High speed



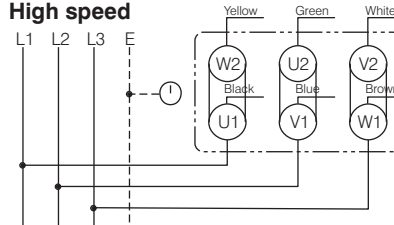
##### Low speed



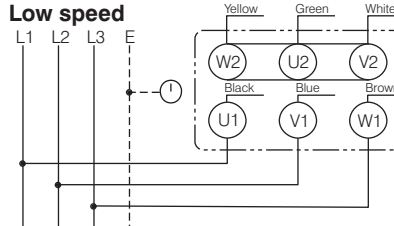
### Diagram ER2

#### TWO-SPEED MOTORS

##### High speed

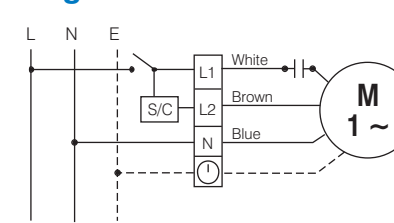


##### Low speed



## 1Ø WIRING DIAGRAM

### Diagram ER3

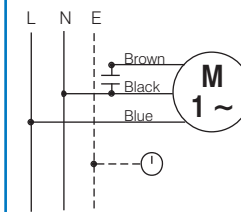


Bridge L1 and L2 if speed controller (S/C) is not required

## 1Ø WIRING DIAGRAMS

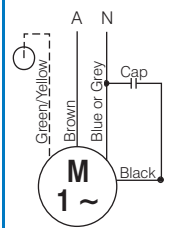
### Diagram ER4

#### 3 active wires plus auto-reset thermal contacts



Codes: CE19.. to CE28..  
+ other fans as shown

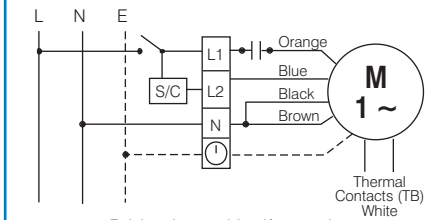
#### Single phase AC motor with capacitor



CE31 only

### Diagram ER5

#### 4 active wires plus manual-reset thermal contacts

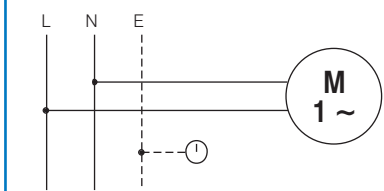


Bridge L1 and L2 if speed controller (S/C) is not required

Codes: CE35.. and over + other fans as shown

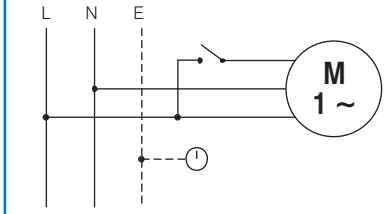
### Diagram ER6

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



### Diagram ER7

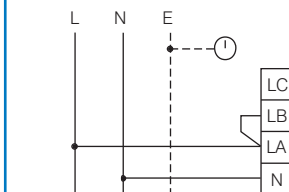
#### Codes: EDM..CT & ..CR



### Diagram ER8

#### Codes: HV-230AE & HV-300AE

Exhaust air mode. For supply air mode bridge LA & LC do not bridge LA & LB.



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

# WIRING DIAGRAMS - EXTERNAL ROTOR MOTORS

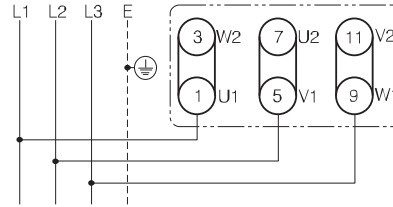
These diagrams apply to **EXTERNAL ROTOR MOTORS** that are fitted to the following products:-

- |          |                                   |                |
|----------|-----------------------------------|----------------|
| • EIE..  | Ezifit In-Wall<br>Diag. ER 10     | Pgs<br>A-28/29 |
| • JISU.. | JetVent Centrifugal<br>Diag. ER 9 | F-8/9          |
| • JIU..  | JetVent Multiflow<br>Diag. ER 9   | F-6/7          |
| • JWW..  | JetVent Warehouse<br>Diag. ER 9   | G-4            |

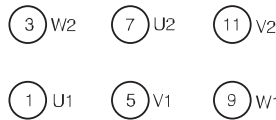
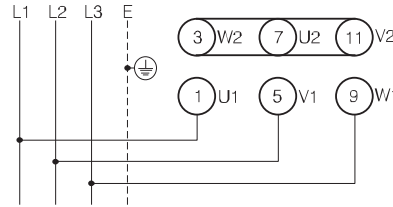
## 3Ø WIRING DIAGRAMS

### Diagram ER9 2 speed Star/Delta motor with 6 pole isolator

#### High speed Delta (Δ)



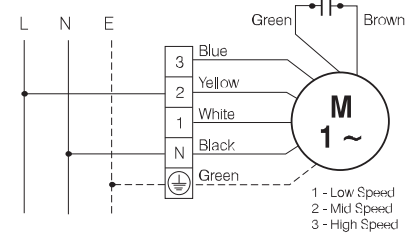
#### Low speed star (Y)



## 1Ø WIRING DIAGRAMS

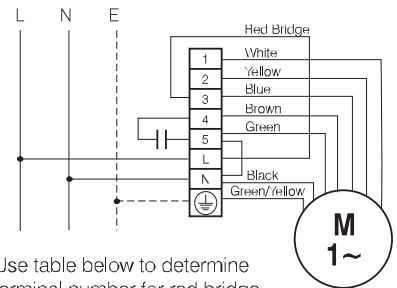
### Diagram ER10

Codes: EIE150



### Diagram ER11

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