

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	

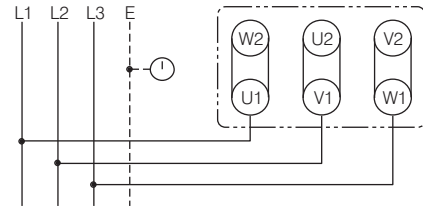
3Ø WIRING DIAGRAMS

Diagram DD1

SINGLE SPEED MOTORS

refer to the name plate data for correct connection

For delta (Δ) wired motors



For star (Y) wired motors

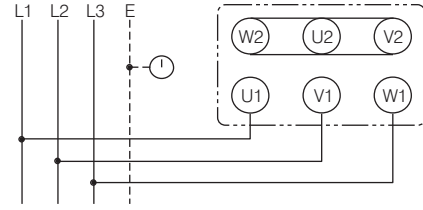
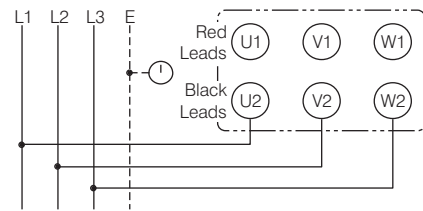


Diagram DD2

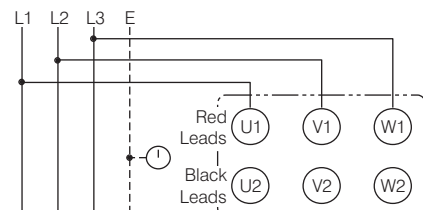
TWO-SPEED MOTORS

with 2 separate windings (dual winding)

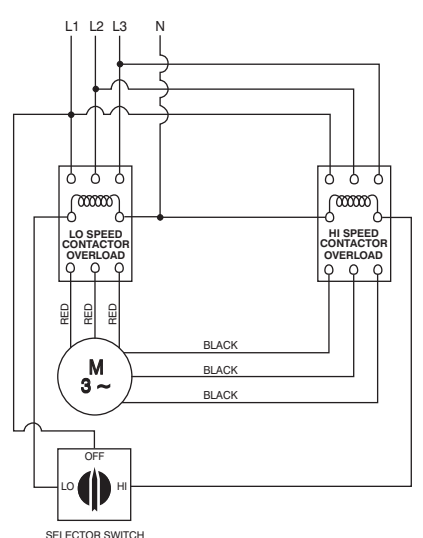
High speed



Low speed



Suggested wiring arrangement



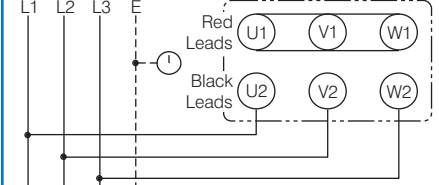
3Ø WIRING DIAGRAMS

Diagram DD3

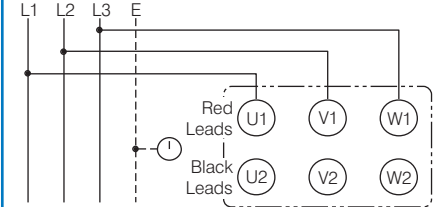
TWO-SPEED MOTORS

in Dahlander connection (tapped winding)

High speed



Low speed



Suggested wiring arrangement

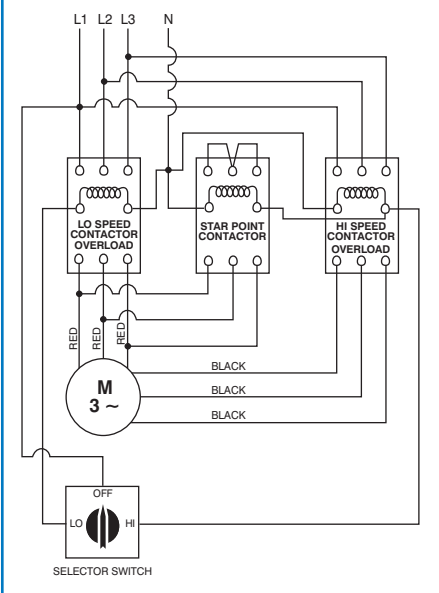
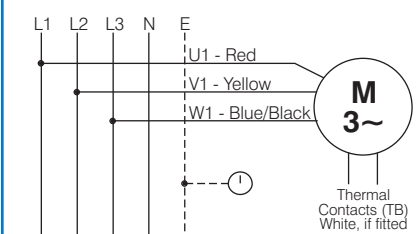


Diagram DD4

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.

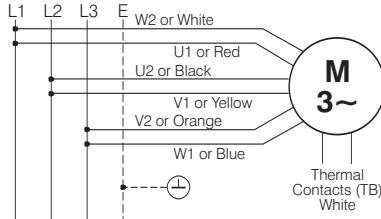
3Ø WIRING DIAGRAMS

Diagram DD5

TWO-SPEED MOTORS

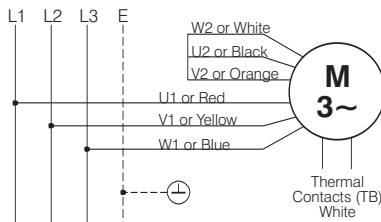
High speed delta (Δ) connection

Codes: ..40. to 63.



Low speed star (γ) connection

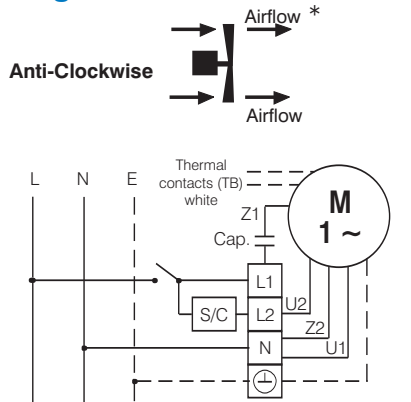
Codes: ..40. and upwards



1Ø WIRING DIAGRAMS

(Form A)

Diagram DD6



Z1 - Blue (AUX) Z2 - Yellow } (COM)
U2 - Black (MAIN) U1 - Red }

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

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

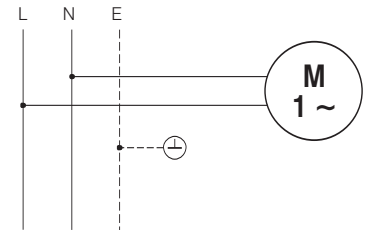
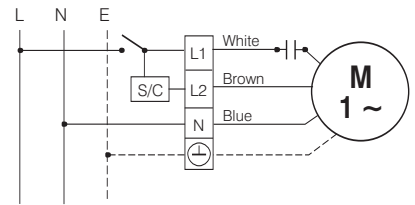


Diagram DD9

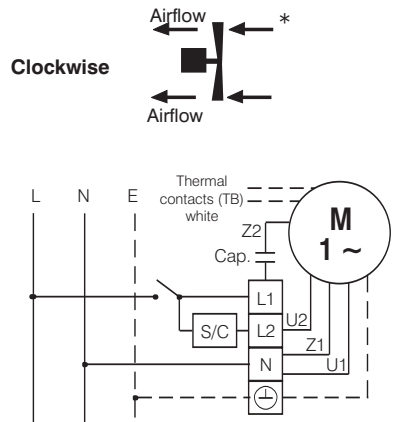


Bridge L1 and L2 if speed controller (S/C) is not required

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

(Form B)

Diagram DD7



Z2 - Yellow (AUX) Z1 - Blue } (COM)
U2 - Black (MAIN) U1 - Red }

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

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.

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.

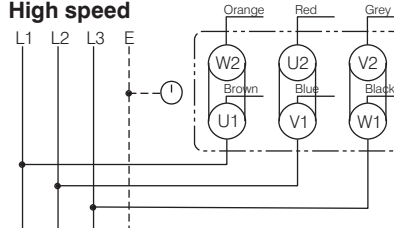
		Pgs
• CD/E..D/V	Gamma Series	D-22/25
	Diags. ER 1, 2, 4, 5	
• CD/E..VGL	GL Gamma Series	D-38/40
	Diags. ER 1, 2, 4, 5	
• CD/E..S	Gamma Supply Series	D-32/33
	Diags. ER 1, 2, 4, 5	
• CF..	Compact axial fans	B-3
	Single-phase motors	
	Diag. ER 6	
• EDM..	EDM Series	A-4/5
	Diags. ER 6, 7	
• FSU146	Diag. 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

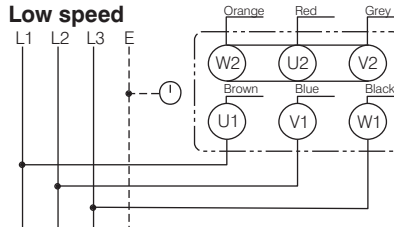
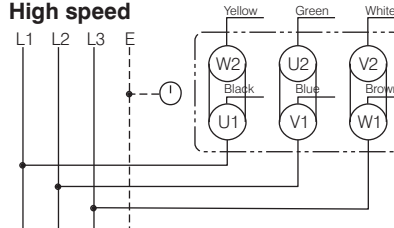


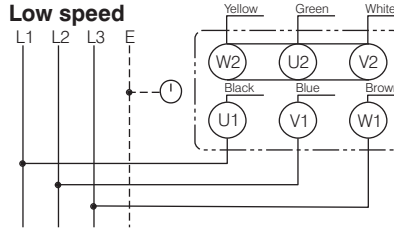
Diagram ER2

TWO-SPEED MOTORS

High speed

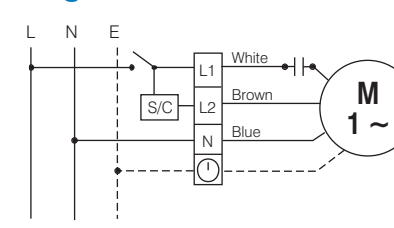


Low speed



1Ø WIRING DIAGRAM

Diagram ER3

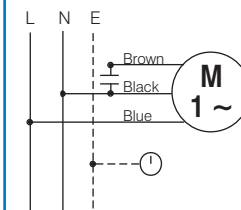


Bridge L1 and L2 if speed controller (S/C) is not required

1Ø WIRING DIAGRAMS

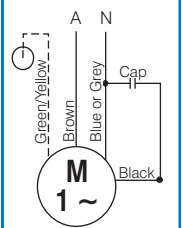
Diagram ER4

3 active wires plus auto-reset thermal contacts



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

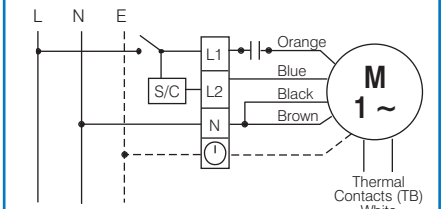
Single phase AC motor with capacitor



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

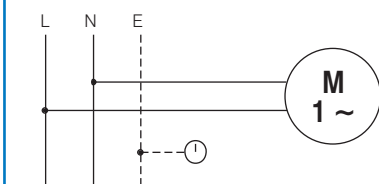


Diagram ER7

Codes: EDM..CT & ..CR

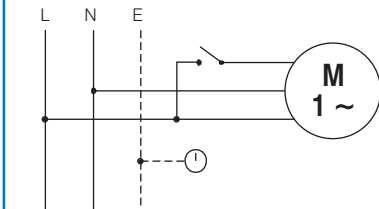
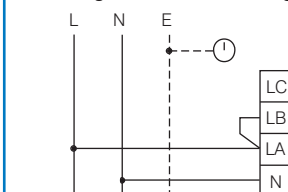


Diagram ER8

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

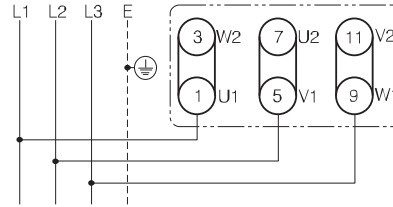
These diagrams apply to **EXTERNAL ROTOR MOTORS** that are fitted to the following products:-

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

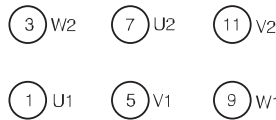
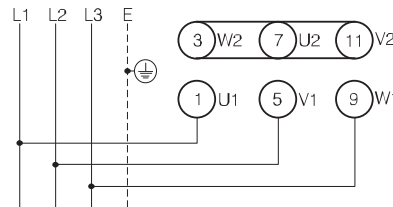
3Ø WIRING DIAGRAMS

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

High speed Delta (Δ)



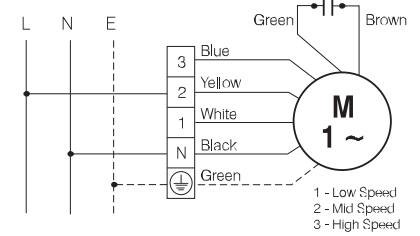
Low speed star (Y)



1Ø WIRING DIAGRAMS

Diagram ER10

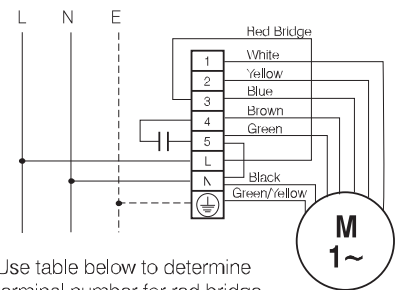
Codes: EIE150



1 - Low Speed
2 - Mid Speed
3 - High Speed

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.