WIRING DIAGRAMS - STANDARD MOTORS

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

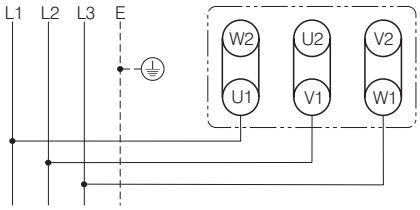
		Sections
• AD/E..D/V	Alpha/Beta Series Diags. DD 4, 5, 6, 7, 10	D
• AD/E..S	Alpha Series Supply Diags. DD 4, 5, 6, 7, 10	D
• *AL..	Centrifugal fans Diags. DD 1, 2, 3	E
• *AP/APV..	Axial Flow fans Diags. DD 1, 2, 3, 6, 7, 9, 10	B
• *APB..	Belt-driven axial fans Diags. DD 1, 2, 3, 6, 7, 9, 10	B
• *APS..	Belt-driven axial fans Diags. DD 1, 2, 3, 6, 7, 9	B
• BFA..	Bifurcated fans Diags. DD 1, 2, 3, 6, 7, 9, 10	B
• CGD/E..	GE Series Diags. DD 1, 2, 3, 8, 9, 10	D
• *CHD/E..	Heritage Series Diags. DD 1, 2, 3, 8, 9, 10	D
• CPD/E..	Compact 2000 Diags. DD 1, 4, 5, 6, 7, 10	A
• *FL..DD	FlexLine Series Diags. DD 1, 2, 3, 10	E
• FP..	Compact F/Proof Series Diag. DD 8	A
• *HC..	High Capacity Series Diags. DD 1, 2, 3, 10	D
• *PCD/E..	PowerLine Series Diags. DD 1, 2, 3, 7, 9, 10	B
• *RDE..	New Generation Series Diags. DD 1, 2, 3, 9, 10	D
• *RDLE..	Alpha/Beta Industrial Diags. DD 1, 2, 3, 9, 10	D
• *RDS..	New Generation Series Diags. DD 1, 2, 3, 9, 10	D
• RSS..	New Generation Series Diags. DD 1, 2, 3, 9	D
• *RVE..	New Generation Series Diags. DD 1, 2, 3, 9, 10	D
• *RVLE..	Alpha/Beta Industrial Diags. DD 1, 2, 3, 9, 10	D
• SCD/E...	Short Cased Series Diags. DD 4, 5, 6, 7	B
• *SQ..	SQ Series Diags. DD 1, 2, 3, 9, 10	A
• SS..	Smoke-Spill Series Diags. DD 1, 2, 3	D

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

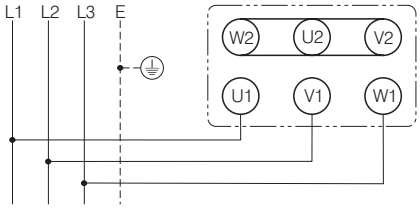
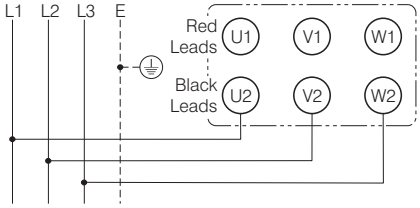


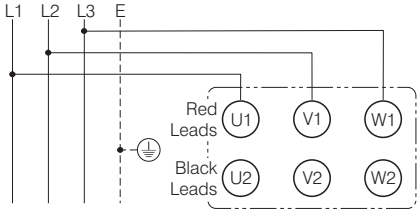
Diagram DD2

TWO-SPEED MOTORS
with 2 separate windings (dual winding)

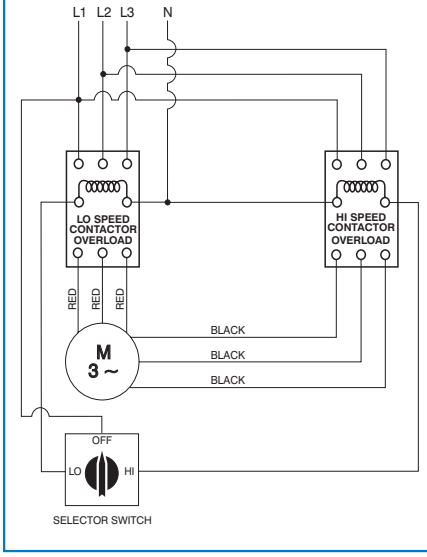
High speed



Low speed



Suggested wiring arrangement

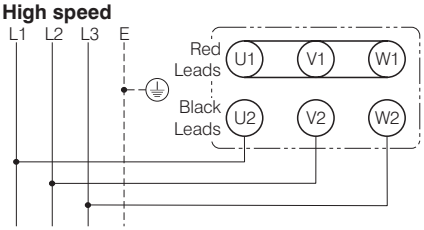


3Ø WIRING DIAGRAMS

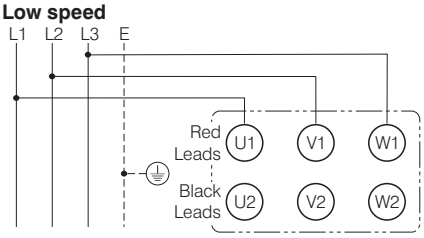
Diagram DD3

TWO-SPEED MOTORS
in Dahlander connection (tapped winding)

High speed



Low speed



Suggested wiring arrangement

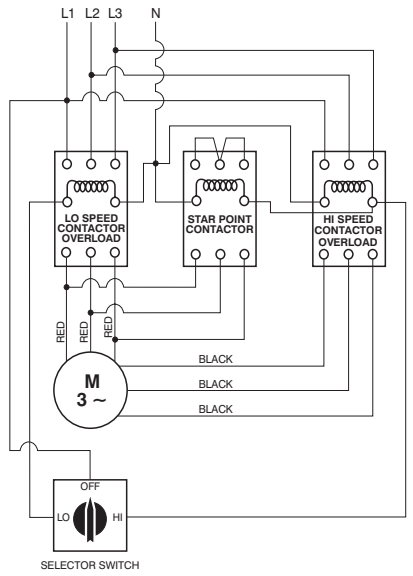
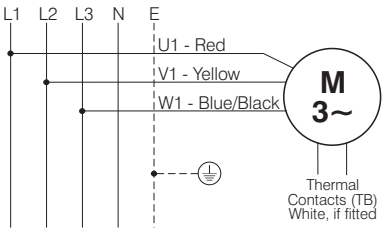


Diagram DD4

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.

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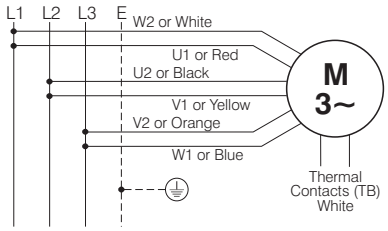
3Ø WIRING DIAGRAMS

Diagram DD5

TWO-SPEED MOTORS

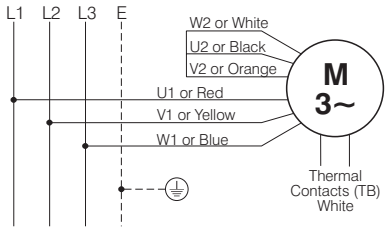
High speed delta (Δ) connection

Codes: ..40. to 63.



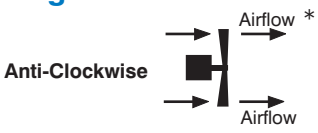
Low speed star (Y) connection

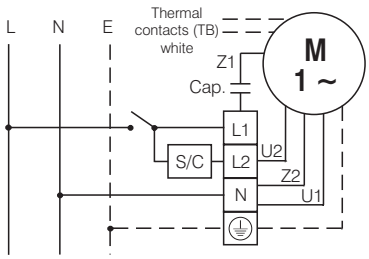
Codes: ..40. and upwards



1Ø WIRING DIAGRAMS (Form A)

Diagram DD6





Z1 - Blue (AUX)
U2 - Black (MAIN)

Z2 - Yellow
U1 - Red
} (COM)

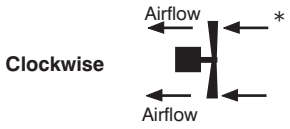
Bridge L1 and L2 if speed controller (S/C) is not required

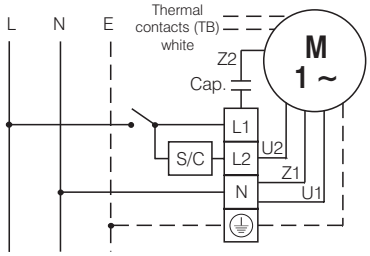
Note:
This diagram suits speed controllers, VA2.0 and VA2.8 only. When using the AVA5.0, VA5.0 and VA8.0 speed controllers, use the AUX, MAIN and COM connections.

* Airflow direction base on left-hand blade installation.

(Form B)

Diagram DD7





Z2 - Yellow (AUX)
U2 - Black (MAIN)

Z1 - Blue
U1 - Red
} (COM)

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

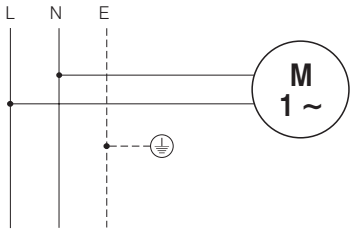
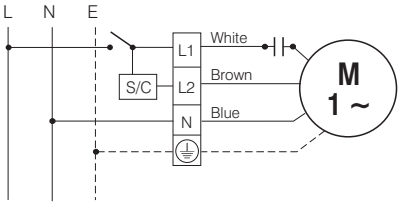


Diagram DD9



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.

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.

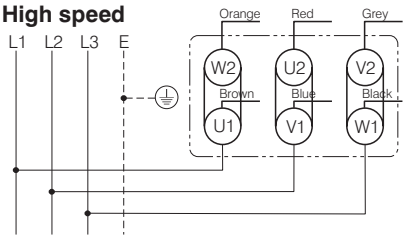
		Sections
• CD/E..D/V	Gamma Series Diags. ER 1, 2, 4, 5	D
• CD/E..S	Gamma Supply Series Diags. ER 1, 2, 4, 5	D
• CF..	Compact axial fans Single-phase motors Diag. ER 6	B
• EDM..	EDM Series Diags. ER 6, 7	A
• GRE..	Sigma Series Diag. ER 4	E
• HCM...	HCM Series Diag. ER 4	A
• HV..	Stylvent Series Diags. ER 6, 8	A
• HXM..	HXM Series Diag. ER 6	A
• MT..	Minitube Series Diags. ER 4, 6	B
• MV..E	Minivent Exhaust Series Diags. ER 4, 6	D
• MV..S	Minivent Supply Series Diags. ER 4, 6	D
• RP..	Ring Plate Series Diag. ER 4	A
• VM..	VentMajor Series Diag. ER 6	B
• SILDES	Silent Design Series Diag. ER 6	A
• EWE	Ezifit Thru Wall Diag. ER 4	A

3Ø WIRING DIAGRAMS

Diagram ER1

TWO-SPEED MOTORS

High speed



Low speed

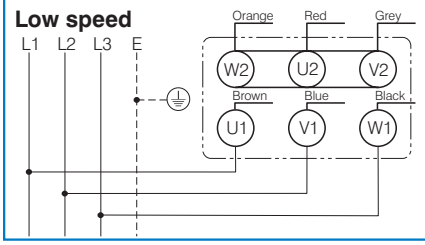
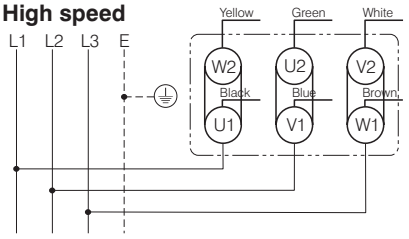


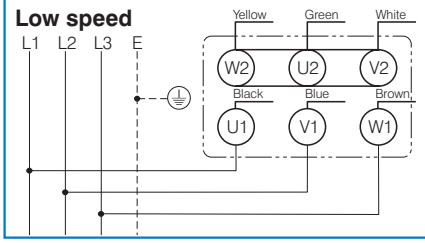
Diagram ER2

TWO-SPEED MOTORS

High speed

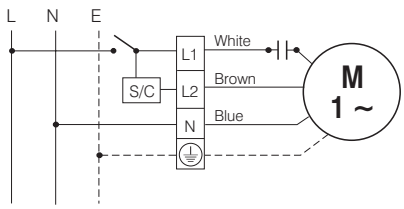


Low speed



1Ø WIRING DIAGRAM

Diagram ER3

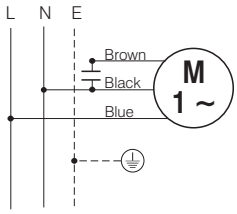


Bridge L1 and L2 if speed controller (S/C) is not required

1Ø WIRING DIAGRAMS

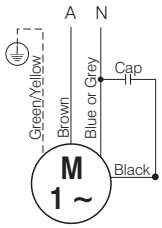
Diagram ER4

3 active wires plus auto-reset thermal contacts



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

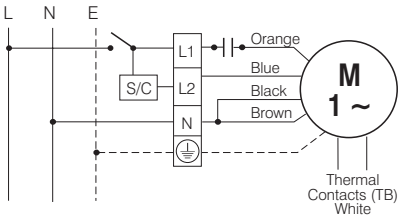
Single phase AC motor with capacitor



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

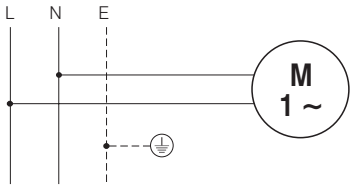


Diagram ER7

Codes: EDM..CT & ..CR

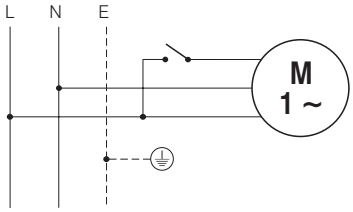
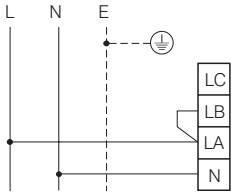


Diagram ER8

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.

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WIRING DIAGRAMS - EXTERNAL ROTOR MOTORS

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

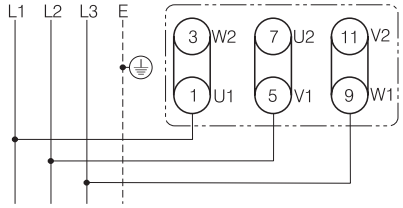
		Pgs
• EIE..	Ezifit In-Wall Diag. ER 10	A
• JVW..	JetVent Warehouse Diag. ER 9	G

3Ø WIRING DIAGRAMS

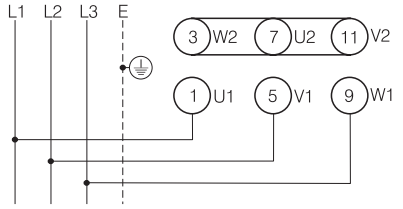
Diagram ER9

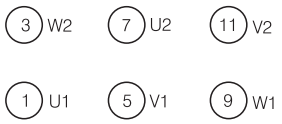
2 speed Star/Delta motor with 6 pole isolator

High speed Delta (△)



Low speed star (Y)

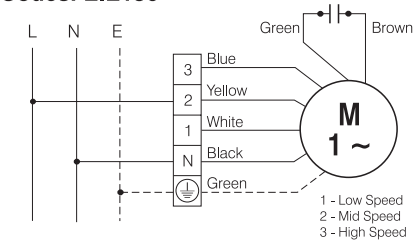




1Ø WIRING DIAGRAMS

Diagram ER10

Codes: EIE150



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

WIRING DIAGRAMS - EC MOTORS

The following EC motors the diagrams have been simplified for ease of presentation. There are many different programing set ups, control signal types, and input/output options available. For detailed information please see the installation manual provide with the fan or contact Fantech.

EC fans should be permanently powered and the control inputs used to operate the fan. EC fans are not to be power cycled regularly; this can damage the fan and will void warranty.

These diagrams apply to EC motors that are fitted to the following products.

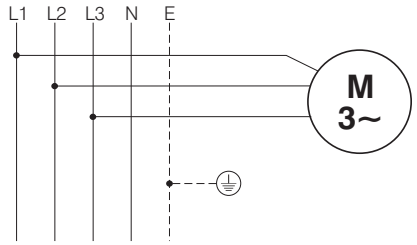
These diagrams apply to EC motors that are fitted to the following products.

		Sections
• APEC..	Ecotronic Axial Diag. EC7	B
• CD/EEC..D/V	Gamma EC Diag. EC1, EC2, EC3, EC4, EC5, EC6	D
• CD/EEC..S	Gamma EC Supply Diag. EC1, EC2, EC3, EC4, EC6	D
• CPEEC..DD	Compact 2000 Ecotronic Diag. EC1, EC2, EC3, EC4, EC5, EC6	A
• GUE/DEC..D/V	Gamma Ultra EC Diag. EC1, EC2, EC3, EC4, EC6	D
• PCE/DEC..	Powerline EC Diag. EC1, EC2, EC3, EC4, EC6	B
• PCEEC..DD	Powerline Ecotronic Diag. EC7	B
• PUE/DEC..	Powerline Ultra EC Diag. EC1, EC2, EC3, EC4, EC6	B
• JETLINE-..ECO	Jetline Ecowatt Diag. EC8	B
• JIU-CPCEC-..	JetVent EC Diag. EC1, EC2, EC6	F
• SCEEC..	Short Case Axial EC Diag. EC1, EC2, EC3, EC4, EC5, EC6	B
• ZFH..EC	AeroMini EC, ZOO EC, AeroMix EC Diag. EC5, EC7	G

3Ø WIRING DIAGRAMS

Diagram EC1

POWER CONNECTIONS



CONTROL CONNECTIONS

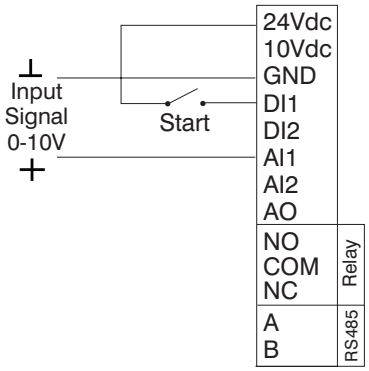
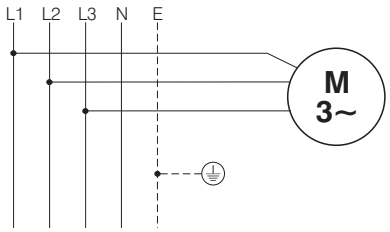
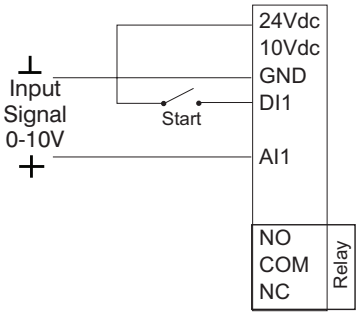


Diagram EC2

POWER CONNECTIONS



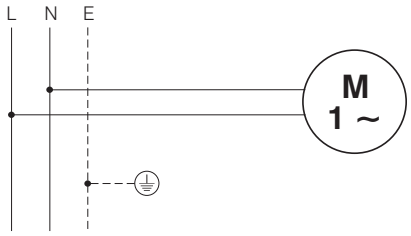
CONTROL CONNECTIONS



1Ø WIRING DIAGRAMS

Diagram EC3

POWER CONNECTIONS



CONTROL CONNECTIONS

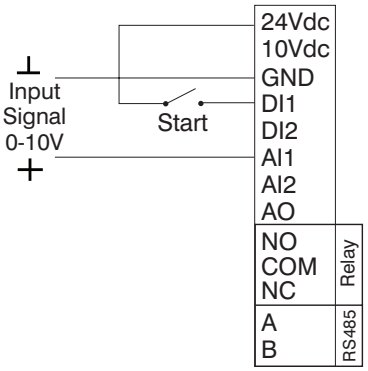
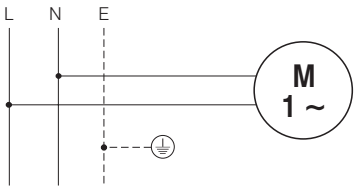
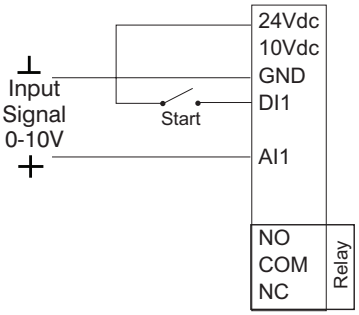


Diagram EC4

POWER CONNECTIONS



CONTROL CONNECTIONS



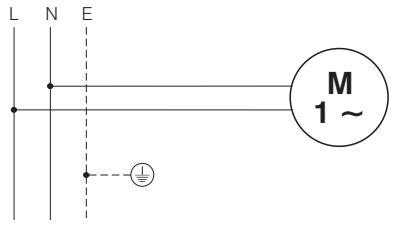
These diagrams are current at the time of publication, check the wiring diagram supplied with the motor.

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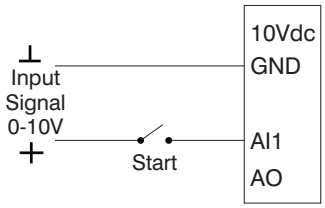
1Ø WIRING DIAGRAMS

Diagram EC5

POWER CONNECTIONS



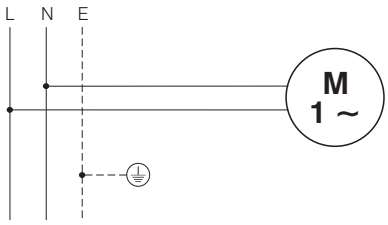
CONTROL CONNECTIONS



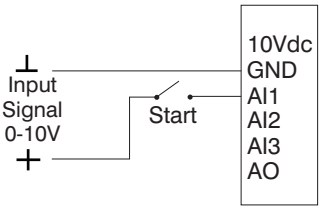
1Ø WIRING DIAGRAMS

Diagram EC7

POWER CONNECTIONS



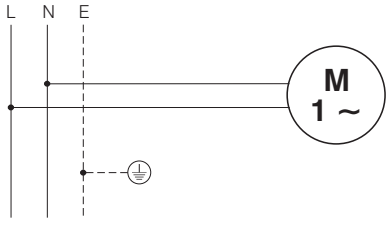
CONTROL CONNECTIONS



1Ø WIRING DIAGRAMS

Diagram EC8

POWER CONNECTIONS



CONTROL CONNECTIONS

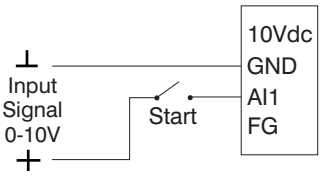
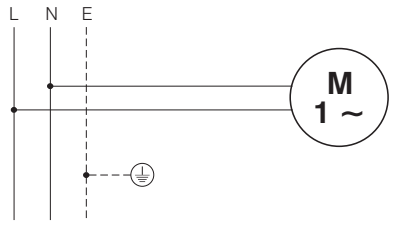
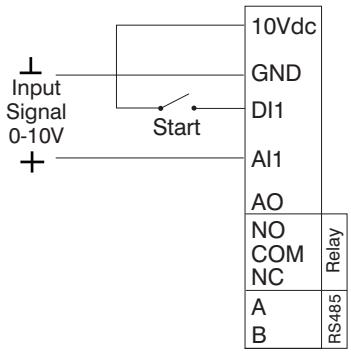


Diagram EC6

POWER CONNECTIONS



CONTROL CONNECTIONS



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