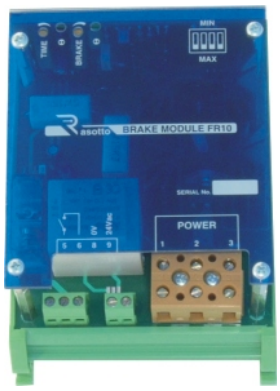
Braking module 15 HP

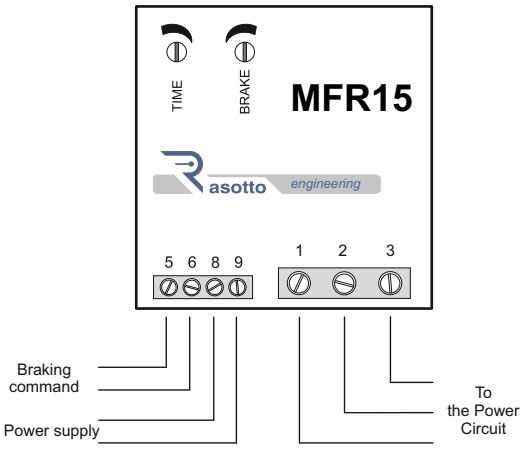


Electronic braking device for three-phase asynchronous motors with direct start or with star-delta starting, 1-speed or 2-speed motors.
The module has the possibility to set the intensity and the braking time, using two trimmers.
Braking is visible on the front panel by means of the red LED and normal operation by means of the green LED.
Quick mounting on DIN rail.
The system has dual motor control: regulated braking and power circuit release at the end of the time.

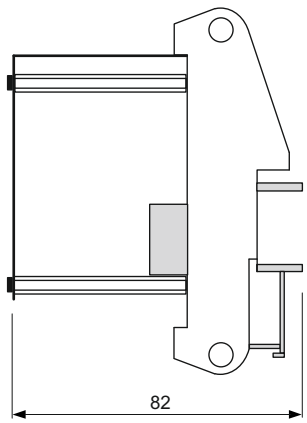
Technical features

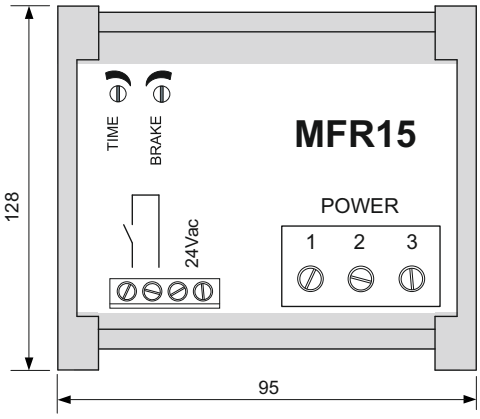
Command Power supply	24V or 110Vac on request
Command Absorption	2VA
Braking voltage	220 / 380Vac
Max load power	15HP 380Vac
Operation conditions	0.. +55°C / 20..90% R.U. without condensation
Storage conditions	-25.. +80°C / 20..90% R.U. without condensation
Mounting	Guida DIN secondo EN 50022
Container	DIN bar container
Protection degree	IP20

Electrical connections



Dimensions





DSSTech Srl
Sede legale: via dell'Artigianato 3 - 36034 - Malo (VI) - Italy
Tel. +390445637541
E-mail: info@dsstech.it
WEB site: www.dsstechautomation.com
P.I., C.F., N. Reg. Imprese IT04118980244
Capitale sociale: 10.000,00 Euro i.v.

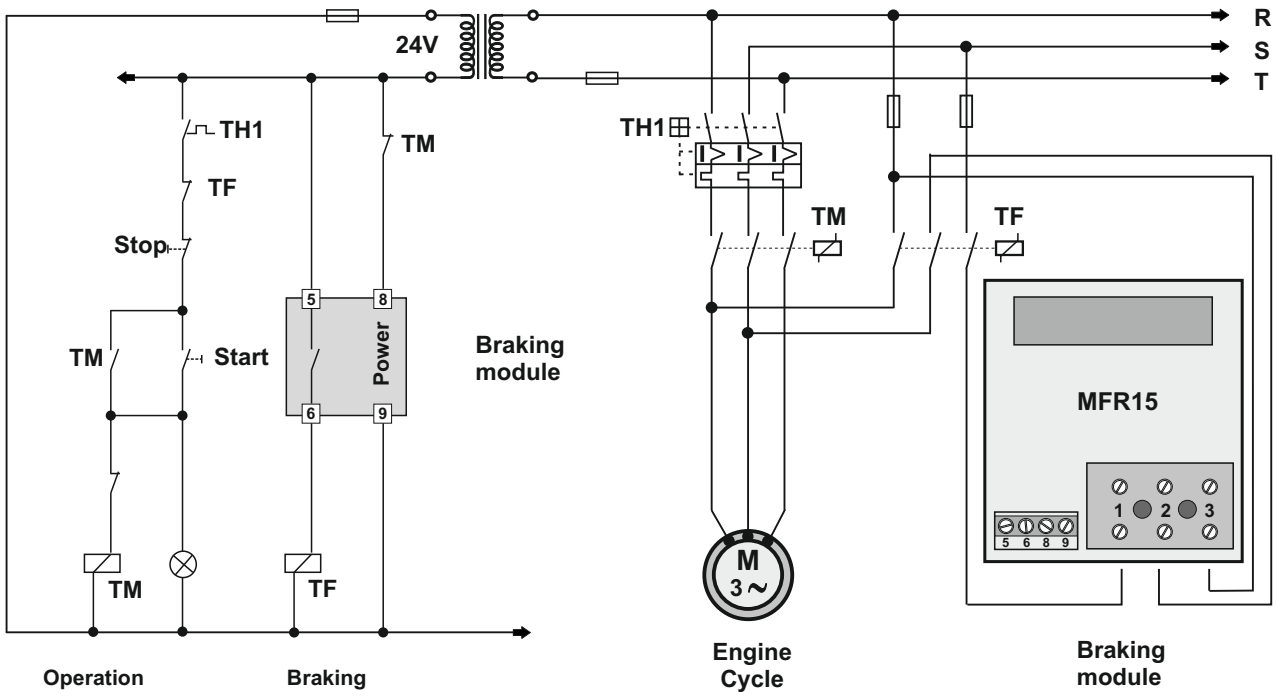
Operation

After starting the three-phase motor, if the stop button is activated, the following sequence occurs:
1) motor supply voltage interruption
2) braking contact closing
3) controlled diode triggering which supplies the adjustable braking current
4) after an adjustable time, the controlled diode goes off and braking is deactivated
5) the braking contactor is reopened and the conditions for a new engine start are restored.

Calibration

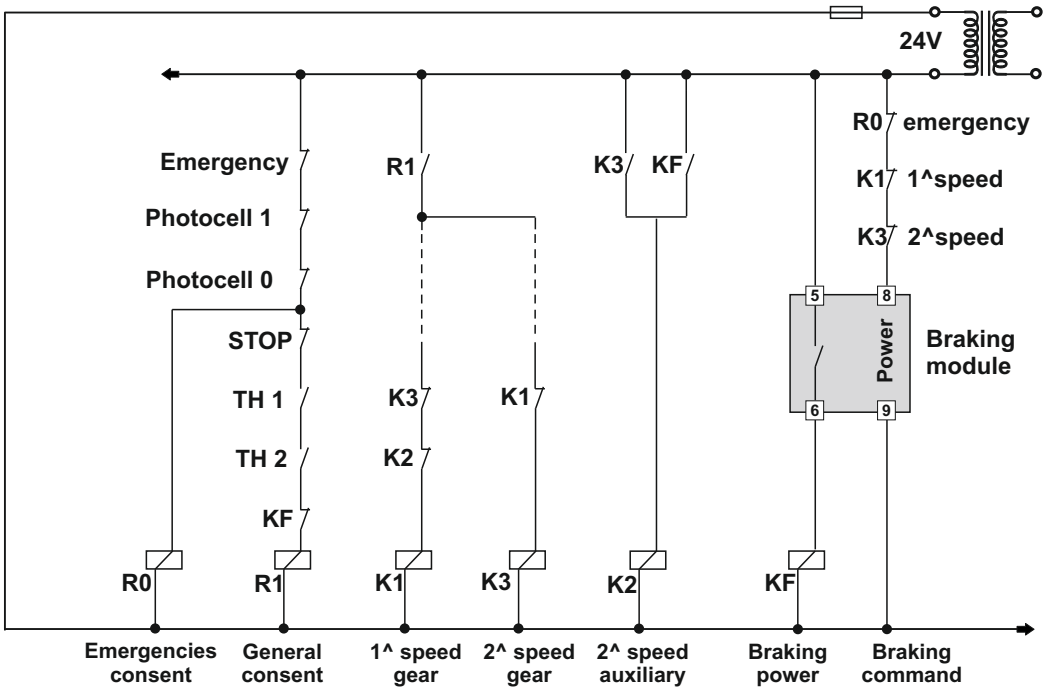
After wiring the circuit according to the enclosed diagram and before powering up the system, bring the braking current to the minimum (BRAKE potentiometer trimmer on the front panel).
Then power the unit and adjust the desired braking time (TIME potentiometer trimmer on the front).
Put the engine in normal working conditions with all the loads inserted in order to have maximum available inertia.
Adjust the braking current by acting on the BRAKE trimmer so that the motor shaft is stopped before the braking time ends.
Leave a margin of the set braking time of about 1/4 more to prevent it from not being able to stop due to the decreased braking current in relation to the motor winding resistance increase when the engine is hot.
In any case, take into account that the braking current should not exceed twice the rated motor current in order not to cause damage to the motor itself.

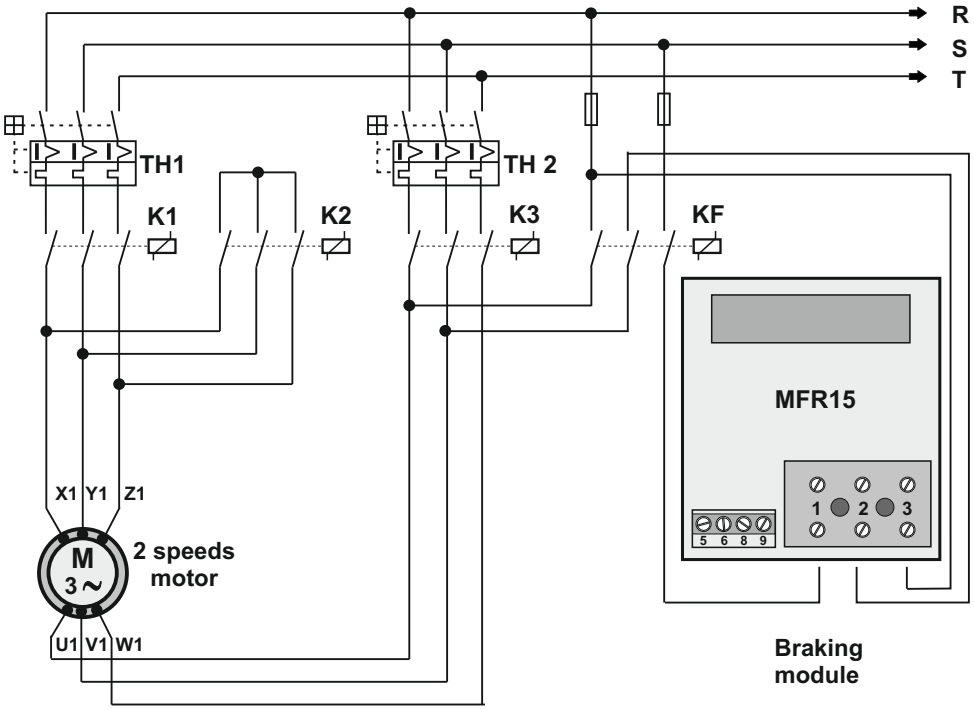
Example of a 1-speed motor connection



DSSTech Srl
Sede legale: via dell'Artigianato 3 - 36034 - Malo (VI) - Italy
Tel. +390445637541
E-mail: info@dsstech.it
WEB site: www.dsstechautomation.com
P.I., C.F., N. Reg. Imprese IT04118980244
Capitale sociale: 10.000,00 Euro i.v.

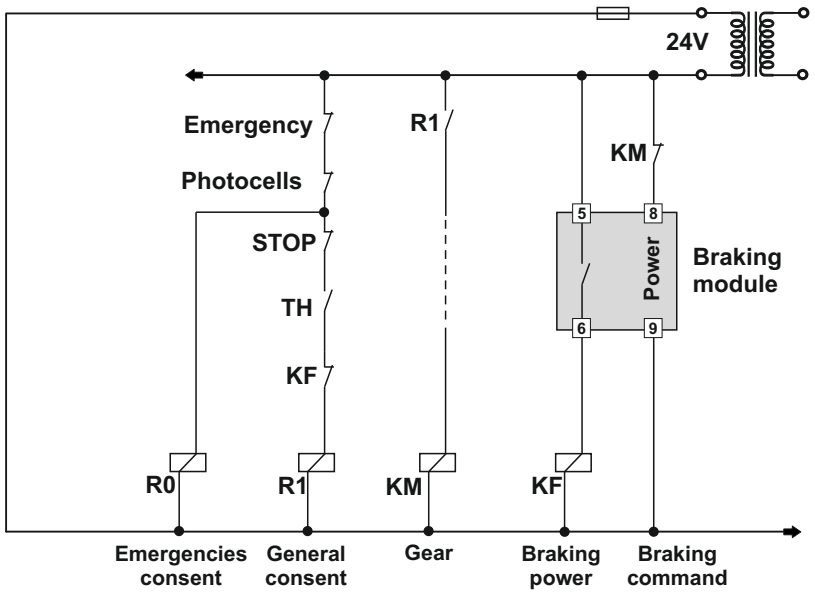
Example of electrical connection with 2-speed motor

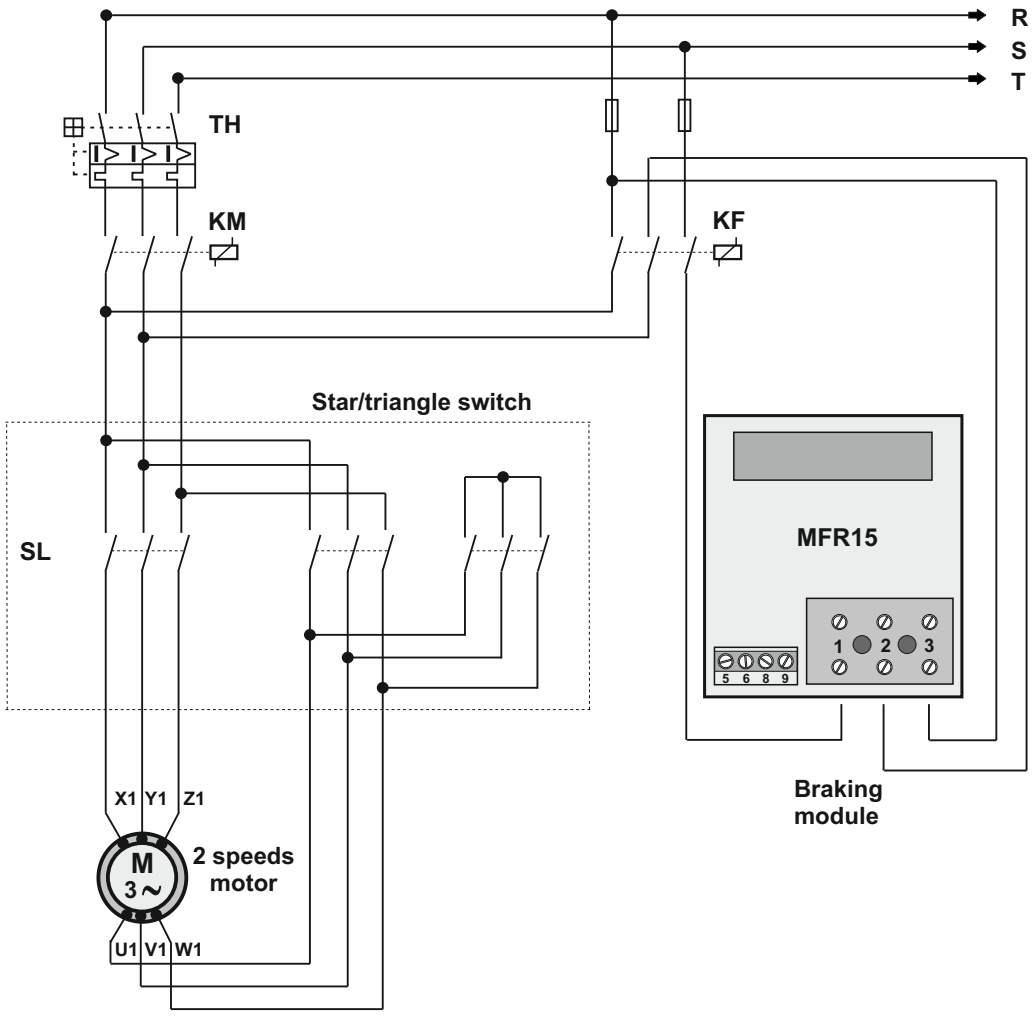




DSSTech Srl
Sede legale: via dell'Artigianato 3 - 36034 - Malo (VI) - Italy
Tel. +390445637541
E-mail: info@dsstech.it
WEB site: www.dsstechautomation.com
P.I., C.F., N. Reg. Imprese IT04118980244
Capitale sociale: 10.000,00 Euro i.v.

Example of electrical connection with 2-speed motor





DSSTech Srl
Sede legale: via dell'Artigianato 3 - 36034 - Malo (VI) - Italy
Tel. +390445637541
E-mail: info@dsstech.it
WEB site: www.dsstechautomation.com
P.I., C.F., N. Reg. Imprese IT04118980244
Capitale sociale: 10.000,00 Euro i.v.