

Functions

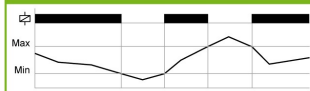
UNDER

The output relay remains switched on until the monitored value falls below the minimum value. As soon as the monitored value exceeds the maximum value, the output relay switches to the on position again.



WIN

The output relay remains switched on until the monitored value lies within the defined window. As soon as the monitored value enters the defined window again, the output relay switches to the on position again.



DELAY

If the monitored value leaves the selected range, the output relay only switches to the off position following expiry of the trip delay.



LATCH (Fault latch)

If the device detects a fault, the output relay only switches on again when the fault latch has been reset. The fault latch can be reset by means of an internal or external reset button or by interrupting the supply voltage.



Voltage Monitoring Models



Model	G4PM690VSYL20**	G4PM500VSYL20**
Functions	Under, Under+Sequence, Window, Window+Sequence	Under, Under+Sequence, Window, Window+Sequence
Contacts	2 C/O	2 C/O
Measuring Voltage	3 Phase - 400/690VAC	3 Phase - 500VAC
Control Voltage	12 - 500VAC**	12 - 500VAC**
Tripping Delay / Fault Latch	0.1 - 10 sec / Yes	0.1 - 10 sec / Yes
Asymmetry Monitoring	5 - 25% or OFF	5 - 25% or OFF
Suitable for Frequency Converters	Yes	Yes
Suitable for Motor Applications	Yes	Yes
Size	45mm wide	45mm wide
List Price	\$425.05	\$425.05

** Please Note that a TR3 Voltage Module needs to be selected for models with ** and is fitted before dispatch. The List Price above includes the TR3 Module. All TR3 Voltage Modules are listed in the Accessories Section.

Functions

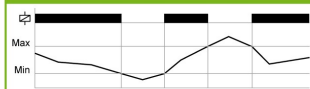
UNDER

The output relay remains switched on until the monitored value falls below the minimum value. As soon as the monitored value exceeds the maximum value, the output relay switches to the on position again.



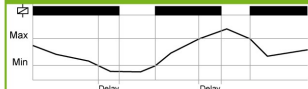
WIN

The output relay remains switched on until the monitored value lies within the defined window. As soon as the monitored value enters the defined window again, the output relay switches to the on position again.



DELAY

If the monitored value leaves the selected range, the output relay only switches to the off position following expiry of the trip delay.



Voltage Monitoring Models



Model	G2PM400VSY20 24-240V	G2PM400VSY20**	G2PM400VSY10**
Functions	Under, Under+Sequence, Window, Window+Sequence	Under, Under+Sequence, Window, Window+Sequence	Under, Under+Sequence, Window, Window+Sequence
Contacts	2 C/O	2 C/O	1 C/O
Measuring Voltage	3 Phase - 400VAC	3 Phase - 400VAC	3 Phase - 400VAC
Control Voltage	24 - 240VAC/DC	12 - 440VAC**	12 - 440VAC**
Tripping Delay	0.1 - 10 sec	0.1 - 10 sec	0.1 - 10 sec
Asymmetry Monitoring	5 - 25% or OFF	5 - 25% or OFF	5 - 25% or OFF
Suitable for Frequency Converters	Yes	Yes	Yes
Suitable for Motor Applications	Yes	Yes	Yes
Size	22.5mm wide	22.5mm wide	22.5mm wide
List Price	\$343.94	\$277.43	\$252.25

** Please Note that a TR2 Voltage Module needs to be selected for models with ** and is fitted before dispatch. The List Price above includes the TR2 Module. All TR2 Voltage Modules are listed in the Accessories Section.

Functions

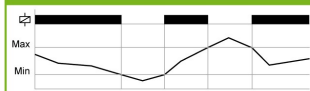
UNDER

The output relay remains switched on until the monitored value falls below the minimum value. As soon as the monitored value exceeds the maximum value, the output relay switches to the on position again.



WIN

The output relay remains switched on until the monitored value lies within the defined window. As soon as the monitored value enters the defined window again, the output relay switches to the on position again.



DELAY

If the monitored value leaves the selected range, the output relay only switches to the off position following expiry of the trip delay.



LATCH (Fault latch)

If the device detects a fault, the output relay only switches on again when the fault latch has been reset. The fault latch can be reset by means of an internal or external reset button or by interrupting the supply voltage.



Voltage Monitoring Models



Model	G2PM230VSY20 24-240V	G2PM230VSY10**	G2YM400VL20**
Functions	Under, Under+Sequence, Window, Window+Sequence	Under, Under+Sequence, Window, Window+Sequence	Under, Under+Sequence, Window, Window+Sequence
Contacts	2 C/O	1 C/O	2 C/O
Measuring Voltage	3 Phase - 230VAC	3 Phase - 230VAC	3 Phase - 400VAC
Control Voltage	24 - 240VAC/DC	12 - 440VAC**	12 - 440VAC**
Tripping Delay / Fault Latch	0.1 - 10 sec / No	0.1 - 10 sec / No	0.1 - 10 sec / Yes
Asymmetry Monitoring	5 - 25% or OFF	5 - 25% or OFF	No
Suitable for Frequency Converters	Yes	Yes	Yes
Suitable for Motor Applications	Yes	Yes	Yes
Size	22.5mm wide	22.5mm wide	22.5mm wide
List Price	\$343.94	\$289.18	\$285.75

** Please Note that a TR2 Voltage Module needs to be selected for models with ** and is fitted before dispatch. The List Price above includes the TR2 Module. All TR2 Voltage Modules are listed in the Accessories Section.

Functions

UNDER

The output relay remains switched on until the monitored value falls below the minimum value. As soon as the monitored value exceeds the maximum value, the output relay switches to the on position again.



WIN

The output relay remains switched on until the monitored value lies within the defined window. As soon as the monitored value enters the defined window again, the output relay switches to the on position again.



DELAY

If the monitored value leaves the selected range, the output relay only switches to the off position following expiry of the trip delay.



START-UP

The output relay switches on when the supply voltage is applied. Changes to measured variables have no impact on the setting of the output relay during start-up suppression.



LATCH (Fault latch)

If the device detects a fault, the output relay only switches on again when the fault latch has been reset. The fault latch can be reset by means of an internal or external reset button or by interrupting the supply voltage.



Voltage Monitoring Models



Model	G2PF400VS02	G2FW50HzYFA02**	G2FW400VL20 24-240V
Functions	Phase Failure & Sequence Monitoring	Voltage & Frequency Monitoring - 50Hz	Frequency Monitoring 50Hz or 60Hz Systems
Contacts	2 C/O	2 C/O	2 C/O
Measuring Voltage	3 Phase - 400VAC	400VAC	110VAC - 400VAC
Control Voltage	400VAC	12 - 440VAC**	24 - 240VAC/DC
Tripping Delay / Fault Latch / Start-up Delay	No	Fixed <200msec / No / 30 sec	0.1 - 10 sec / Yes / 0 - 10 sec
Asymmetry Monitoring	Fixed - 30%	No	No
Suitable for Frequency Converters	Yes	Yes	Yes
Suitable for Motor Applications	Yes	Yes	Yes
Size	22.5mm wide	22.5mm wide	22.5mm wide
List Price	\$163.69	\$568.51	\$329.32

** Please Note that a TR2 Voltage Module needs to be selected for models with ** and is fitted before dispatch. The List Price above includes the TR2 Module. All TR2 Voltage Modules are listed in the Accessories Section.

Functions

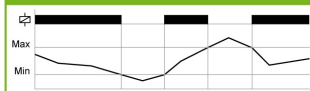
UNDER

The output relay remains switched on until the monitored value falls below the minimum value. As soon as the monitored value exceeds the maximum value, the output relay switches to the on position again.



WIN

The output relay remains switched on until the monitored value lies within the defined window. As soon as the monitored value enters the defined window again, the output relay switches to the on position again.



OVER

The output relay remains switched on until the monitored value exceeds the maximum value. As soon as the monitored value falls below the minimum value, the output relay switches to the on position again.



START-UP

The output relay switches on when the supply voltage is applied. Changes to measured variables have no impact on the setting of the output relay during start-up suppression.



LATCH (Fault latch)

If the device detects a fault, the output relay only switches on again when the fault latch has been reset. The fault latch can be reset by means of an internal or external reset button or by interrupting the supply voltage.



DELAY

If the monitored value leaves the selected range, the output relay only switches to the off position following expiry of the trip delay.



Voltage Monitoring Models



Model	G2UM300VL10**	G2UM300VL20 24-240V	G2UM10VL20 24-240V
Functions	Under, Over, Window	Under, Over, Window	Under, Over, Window
Contacts	2 C/O	2 C/O	2 C/O
Measuring Voltage	Single Phase - 30V/60V/300V AC/DC	Single Phase - 30V/60V/300V AC/DC	Single Phase - 60mV/150mV/10V AC/DC
Control Voltage	24 - 240VAC/DC	24 - 240VAC/DC	24 - 240VAC/DC
Tripping Delay/Fault Latch/Start-up Delay	0.1 - 10 sec / Yes / 0 - 10 sec	0.1 - 10 sec / Yes / 0 - 10 sec	0.1 - 10 sec / Yes / 0 - 10 sec
Asymmetry Monitoring	No	No	No
Suitable for Frequency Converters	Yes	Yes	Yes
Suitable for Motor Applications	Yes	Yes	Yes
Size	22.5mm wide	22.5mm wide	22.5mm wide
List Price	\$299.50	\$311.60	\$311.60

** Please Note that a TR2 Voltage Module needs to be selected for models with ** and is fitted before dispatch. The List Price above includes the TR2 Module. All TR2 Voltage Modules are listed in the Accessories Section.

Functions

WIN

The output relay remains switched on until the monitored value lies within the defined window. As soon as the monitored value enters the defined window again, the output relay switches to the on position again.



START-UP

The output relay switches on when the supply voltage is applied. Changes to measured variables have no impact on the setting of the output relay during start-up suppression.



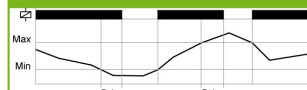
LATCH (Fault latch)

If the device detects a fault, the output relay only switches on again when the fault latch has been reset. The fault latch can be reset by means of an internal or external reset button or by interrupting the supply voltage.



DELAY

If the monitored value leaves the selected range, the output relay only switches to the off position following expiry of the trip delay.



Voltage Monitoring Models



Model	G2UW300VL10**
Functions	Window
Contacts	2 C/O
Measuring Voltage	Single Phase - 30V/60V/300V AC/DC
Control Voltage	24 - 240VAC/DC
Tripping Delay/Fault Latch/Start-up Delay	0.1 - 10 sec / Yes / 0 - 10 sec
Asymmetry Monitoring	No
Suitable for Frequency Converters	Yes
Suitable for Motor Applications	Yes
Size	22.5mm wide
List Price	\$293.43

** Please Note that a TR2 Voltage Module needs to be selected for models with ** and is fitted before dispatch. The List Price above includes the TR2 Module. All TR2 Voltage Modules are listed in the Accessories Section.

Functions

UNDER

The output relay remains switched on until the monitored value falls below the minimum value. As soon as the monitored value exceeds the maximum value, the output relay switches to the on position again.



WIN

The output relay remains switched on until the monitored value lies within the defined window. As soon as the monitored value enters the defined window again, the output relay switches to the on position again.



DELAY

If the monitored value leaves the selected range, the output relay only switches to the off position following expiry of the trip delay.



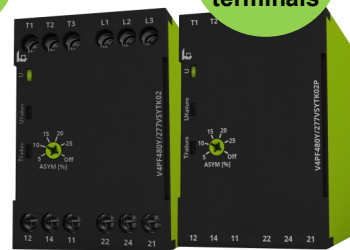
Voltage Monitoring Models



VEO Range
now with
**PUSH-IN
terminals**



VEO Range
now with
**PUSH-IN
terminals**



VEO Range
now with
**PUSH-IN
terminals**

Model	V2PM400Y/230VS10	V2PF480Y/277VSY01	V4PF480Y/277VSYTK02
Model PUSH-IN Type	V2PM400Y/230VS10P	V2PF480Y/277VSY01P	V4PF480Y/277VSYTK02P
Functions	Under, Under+Sequence, Window, Window+Sequence	Under, Under+Sequence	Under, Under+Sequence, Motor Temperature (PTC)
Contacts	1 C/O	1 C/O	1 C/O
Measuring Voltage	3 Phase - 400VAC	3 Phase - 400/VAC	3 Phase - 400VAC
Control Voltage	400VAC	400VAC	400VAC
Tripping Delay	0.1 - 10 sec	Fixed < 250m sec	Fixed < 250m sec
Asymmetry Monitoring	No	5 - 25% or OFF	5 - 25% or OFF
Suitable for Frequency Converters	Yes	Yes	Yes
Suitable for Motor Applications	Yes	Yes	Yes
Size	22.5mm wide	22.5mm wide	45mm wide
List Price	\$265.90	\$149.23	\$253.31

Functions

UNDER

The output relay remains switched on until the monitored value falls below the minimum value. As soon as the monitored value exceeds the maximum value, the output relay switches to the on position again.



WIN

The output relay remains switched on until the monitored value lies within the defined window. As soon as the monitored value enters the defined window again, the output relay switches to the on position again.



DELAY

If the monitored value leaves the selected range, the output relay only switches to the off position following expiry of the trip delay.



Voltage Monitoring Models



Model	V2UM230V10	V2UF230V10
Model PUSH-IN Type		
Functions	Under, Window	Voltage Drop Detector 10 to 40msec
Contacts	1 C/O	1 C/O
Measuring Voltage	1 Phase - 24VDC or 230VAC/DC	1 Phase
Control Voltage	24VDC or 230VAC/DC	230VAC
Tripping Delay	0.1 - 10 sec	0.1 - 10 sec
Asymmetry Monitoring	No	No
Suitable for Frequency Converters	Yes	Yes
Suitable for Motor Applications	Yes	Yes
Size	22.5mm wide	22.5mm wide
List Price	\$187.18	\$166.40

Functions

UNDER

The output relay remains switched on until the monitored value falls below the minimum value. As soon as the monitored value exceeds the maximum value, the output relay switches to the on position again.



WIN

The output relay remains switched on until the monitored value lies within the defined window. As soon as the monitored value enters the defined window again, the output relay switches to the on position again.



DELAY

If the monitored value leaves the selected range, the output relay only switches to the off position following expiry of the trip delay.



Voltage Monitoring Models



Model	E1YM400VS10	E1PF400VSY01	E3PF400VSY02
Functions	Under, Under+Sequence, Window, Window+Sequence	Under, Under+Sequence	Under, Under+Sequence
Contacts	1 C/O	1 C/O	2 C/O
Measuring Voltage	3 & 1 Phase - 400/230VAC	3 Phase - 400/VAC	3 Phase - 400/VAC
Control Voltage	400/230VAC	400VAC	400VAC
Tripping Delay	0.1 - 10 sec	Fixed - 100m sec	Fixed - 100m sec
Asymmetry Monitoring	No	5 - 25% or OFF	5 - 25% or OFF
Suitable for Frequency Converters	No	No	No
Suitable for Motor Applications	Yes	Yes	Yes
Size	17.5mm wide	17.5mm wide	55mm wide
List Price	\$180.11	\$155.31	\$202.59

Functions

UNDER

The output relay remains switched on until the monitored value falls below the minimum value. As soon as the monitored value exceeds the maximum value, the output relay switches to the on position again.



WIN

The output relay remains switched on until the monitored value lies within the defined window. As soon as the monitored value enters the defined window again, the output relay switches to the on position again.

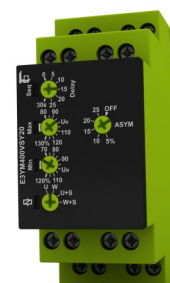


DELAY

If the monitored value leaves the selected range, the output relay only switches to the off position following expiry of the trip delay.



Voltage Monitoring Model

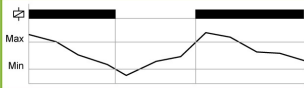


Model	E3YM400VS10
Functions	Under, Under+Sequence, Window, Window+Sequence, Asymmetry
Contacts	2 C/O
Measuring Voltage	3 & 1 Phase - 400/230VAC
Control Voltage	400/230VAC
Tripping Delay	0 - 30 sec
Asymmetry Monitoring	5 - 25% or OFF
Suitable for Frequency Converters	No
Suitable for Motor Applications	Yes
Size	35mm wide
List Price	\$239.92

Functions

UNDER

The output relay remains switched on until the monitored value falls below the minimum value. As soon as the monitored value exceeds the maximum value, the output relay switches to the on position again.



Voltage Monitoring Models



Model	E1PF480Y/277VSY01	E1YU400V01	E3YU400V02
Functions	Under + Sequence	Under (adjustable)	Under (adjustable)
Contacts	1 C/O	1 C/O	2 C/O
Measuring Voltage	3 Phase - 480/277VAC	3 & 1 Phase - 400/230VAC	3 & 1 Phase - 400/230VAC
Control Voltage	480/277VAC	400/230VAC	400/230VAC
Tripping Delay	Fixed - 100m sec	Fixed - 200m sec	Fixed - 200m sec
Asymmetry Monitoring	5 - 25% or OFF	No	No
Suitable for Frequency Converters	No	No	No
Suitable for Motor Applications	Yes	No	No
Size	17.5mm wide	17.5mm wide	35mm wide
List Price	\$175.30	\$142.31	\$205.08

Functions

UNDER

The output relay remains switched on until the monitored value falls below the minimum value. As soon as the monitored value exceeds the maximum value, the output relay switches to the on position again.



WIN

The output relay remains switched on until the monitored value lies within the defined window. As soon as the monitored value enters the defined window again, the output relay switches to the on position again.



LATCH (Fault latch)

If the device detects a fault, the output relay only switches on again when the fault latch has been reset. The fault latch can be reset by means of an internal or external reset button or by interrupting the supply voltage.



Voltage Monitoring Models



Model	E1YF400VT01	E3YF400VT02	E3YF400VFAL02
Functions	Under, Test	Under, Test	Window, Latch
Contacts	1 C/O	2 C/O	2 C/O
Measuring Voltage	3 & 1 Phase - 400/230VAC	3 & 1 Phase - 400/230VAC	3 & 1 Phase - 400/230VAC
Control Voltage	400/230VAC	400/230VAC	400/230VAC
Tripping Delay / Failure Delay	Fixed - 200m sec	Fixed - 200m sec	Fixed - 200m sec / 20m sec
Asymmetry Monitoring	No	No	No
Suitable for Frequency Converters	No	No	No
Suitable for Motor Applications	No	No	No
Size	17.5mm wide	35mm wide	35mm wide
List Price	\$145.04	\$210.35	\$205.08

Functions

UNDER

The output relay remains switched on until the monitored value falls below the minimum value. As soon as the monitored value exceeds the maximum value, the output relay switches to the on position again.



START-UP

The output relay switches on when the supply voltage is applied. Changes to measured variables have no impact on the setting of the output relay during start-up suppression.



Voltage Monitoring Models



Model	E1YF400V01	E3YF400V02	E3YF400VE20
Functions	Under (85%)	Under (85%)	Under (85%), On-Delay
Contacts	1 C/O	2 C/O	2 C/O
Measuring Voltage	3 & 1 Phase - 400/230VAC	3 & 1 Phase - 400/230VAC	3 & 1 Phase - 400/230VAC
Control Voltage	400/230VAC	400/230VAC	400/230VAC
Tripping Delay	Fixed - 200m sec	Fixed - 200m sec	Reset Time 0.5 sec
Asymmetry Monitoring	No	No	No
Suitable for Frequency Converters	No	No	No
Suitable for Motor Applications	No	No	No
Size	17.5mm wide	35mm wide	35mm wide
List Price	\$124.16	\$182.65	\$205.08

Functions

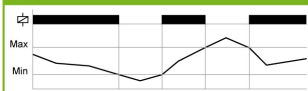
UNDER

The output relay remains switched on until the monitored value falls below the minimum value. As soon as the monitored value exceeds the maximum value, the output relay switches to the on position again.



WIN

The output relay remains switched on until the monitored value lies within the defined window. As soon as the monitored value enters the defined window again, the output relay switches to the on position again.



Voltage Monitoring Model



Model	E1UM230V01
Functions	1 Phase AC/DC Monitoring Win, Under
Contacts	1 C/O
Measuring Voltage	24AC/24VDC/230VAC
Tripping Delay	N/A
Asymmetry Monitoring	No
Suitable for Frequency Converters	No
Suitable for Motor Applications	No
Size	17.5mm wide
List Price	\$180.11

Functions

UNDER

The output relay remains switched on until the monitored value falls below the minimum value. As soon as the monitored value exceeds the maximum value, the output relay switches to the on position again.



WIN

The output relay remains switched on until the monitored value lies within the defined window. As soon as the monitored value enters the defined window again, the output relay switches to the on position again.



DELAY

If the monitored value leaves the selected range, the output relay only switches to the off position following expiry of the trip delay.



Voltage Monitoring Models



Model	R11X	K3YM400VSY20	K3PF400VSY02
Functions	11 Pin Base	Under, Under+Sequence, Window, Window+Sequence	Under + Sequence
Contacts	300VAC	2 C/O	2 C/O
Measuring Voltage		3 & 1 Phase - 400/230VAC	3 Phase - 400VAC
Control Voltage		400/230VAC	400VAC
Tripping Delay		0.1 - 10 sec	Fixed - 100m sec
Asymmetry Monitoring		5 - 30% or OFF	5 - 30% or OFF
Suitable for Frequency Converters		No	No
Suitable for Motor Applications		Yes	Yes
Size	38mm wide	38mm wide	38mm wide
List Price	\$11.08	\$225.56	\$202.09

Functions

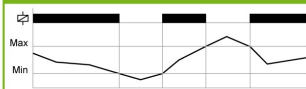
UNDER

The output relay remains switched on until the monitored value falls below the minimum value. As soon as the monitored value exceeds the maximum value, the output relay switches to the on position again.



WIN

The output relay remains switched on until the monitored value lies within the defined window. As soon as the monitored value enters the defined window again, the output relay switches to the on position again.



Voltage Monitoring Models



Model	R11X	K3UM230VAC02	K3UM24VDC02
Functions	11 Pin Base	Under & Window	Under & Window
Contacts	300VAC	2 C/O	2 C/O
Measuring Voltage		Single Phase - 230VAC	Single Phase - 24VDC
Control Voltage		230VAC	24VDC
Tripping Delay		None	None
Asymmetry Monitoring		No	No
Suitable for Frequency Converters		No	No
Suitable for Motor Applications		Yes	Yes
Size	38mm wide	38mm wide	38mm wide
List Price	\$11.08	\$207.31	\$215.13