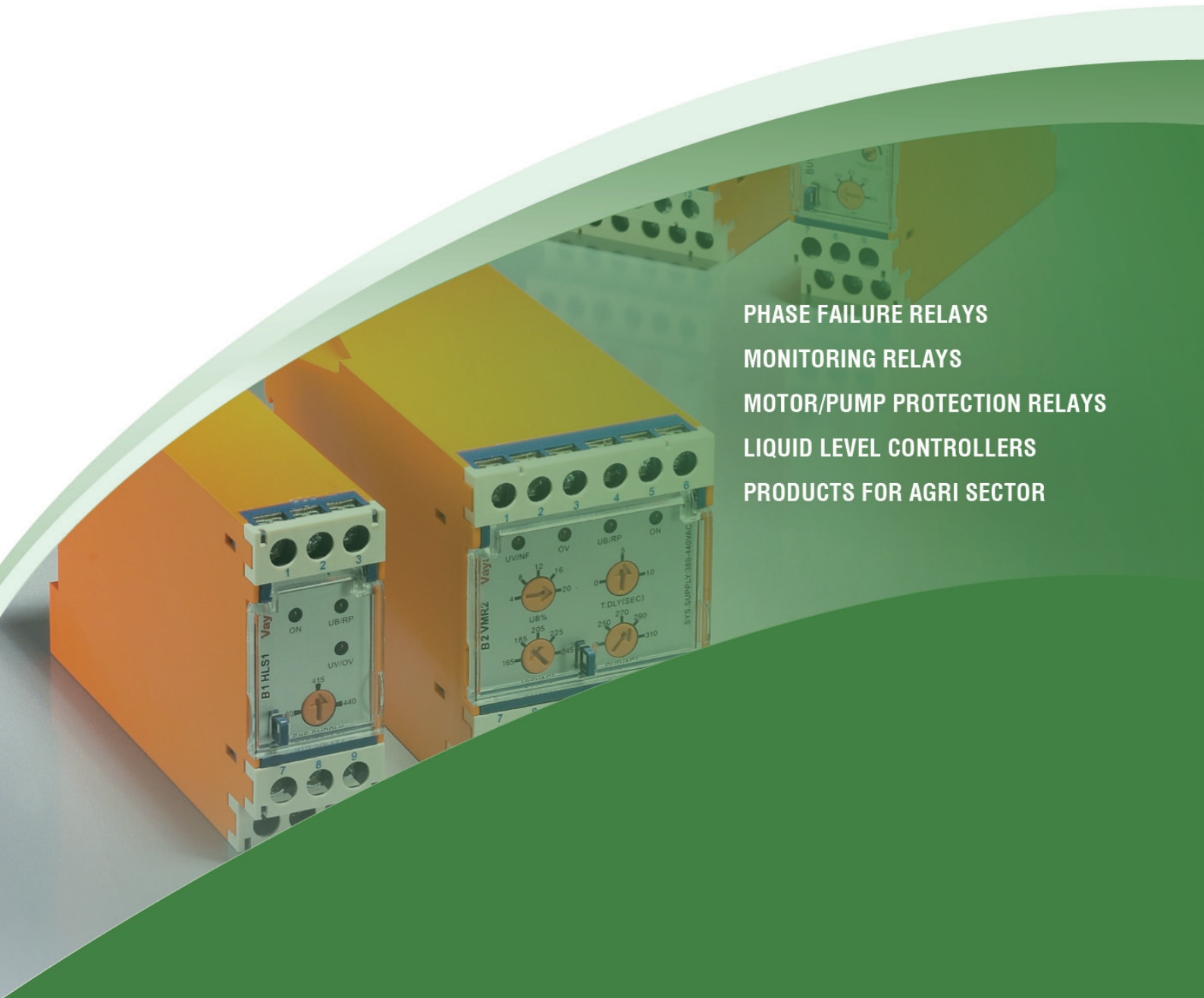
Vaya



PHASE FAILURE RELAYS

MONITORING RELAYS

MOTOR/PUMP PROTECTION RELAYS

LIQUID LEVEL CONTROLLERS

PRODUCTS FOR AGRI SECTOR

Vaya

PHASE FAILURE RELAYS

These relays are suitable for monitoring incoming 3-phase supply from Mains (Electricity distributionline). Being independent of load, they can be used forany HP/KW rating of load.

MODELS

BSP B1	BHLV B2	B2 VMR1
BSP B2	BLV B2	B2 VMR2
BVMR7	BMR B2	B2 VMR3
BP1 PFS1	B1 HLS1	

FEATURES

- Fixed/adjustable unbalance settings
- Fixed/adjustable undervoltage/over-voltage settings
- Fixed/adjustable trip delays
- Built-in or external power supply
- Resetting Auto / Manual / Remote
- Output contacts: 1 CO or 2 CO
- Choice of enclosures (DIN-Rail,Plug-in)
- Models with Micro-Controller based design
- Use of SMD Technology
- User-friendly LED indications

PROTECTIONS / FUNCTIONS

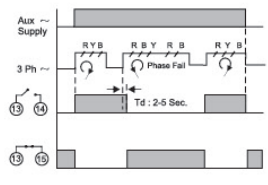
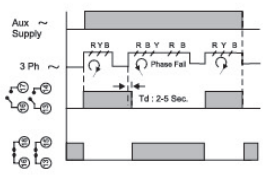
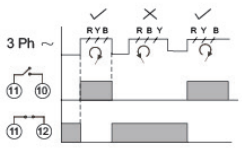
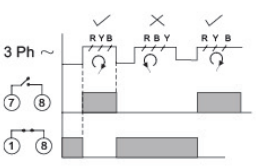
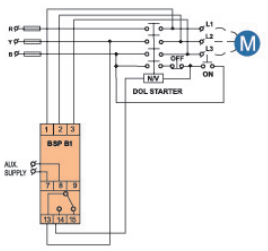
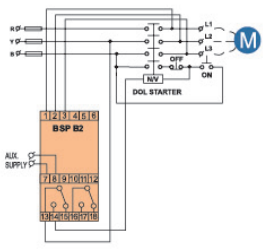
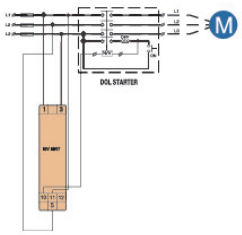
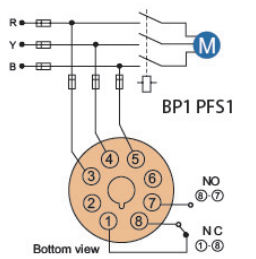
- Phase Failure (Phase Loss / Single Phasing)
- Phase sequence reversal,
- Voltage Unbalance,
- Under Voltage,
- Over Voltage
- Dry Run

Ordering Instructions

- ✓ Product Family Name
- ✓ Model Name
- ✓ System Supply Voltage & Frequency
- ✓ Aux. Supply / Control supply voltage

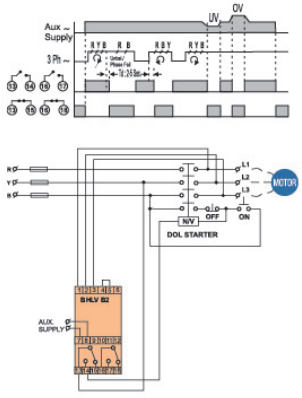
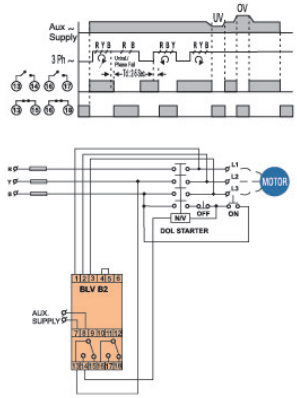
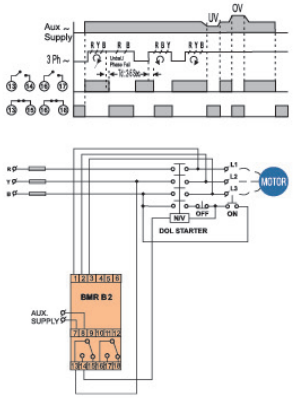
PHASE FAILURE RELAYS

Vaya

Model	BSP B1 Phase Failure Relay	BSP B2 Phase Failure Relay	BVMR7 Phase Sequence Relay	BP1 PFS1 Phase Failure Relay
Product				
	Phase Failure, Unbalance, Phase Sequence, Auto Reset, Fixed Unbalance Setting, 1 CO output Relay	Phase Failure, Unbalance, Phase Sequence, Auto/Manual/Remote Reset, Adjustable Unbalance setting, 2 CO output relay	Phase Sequence, Auto Reset, 1 CO output relay	Phase Sequence, Auto Reset, 1 CO output relay
Supply Voltage	100-120/220-240/380-440V AC ± 20%	100-120/220-240/380-440V AC ± 20%	380 – 440 VAC, ± 20%, 3PH-3 Wire	110/ 220/ 380/ 415 VAC ± 10%,
System	50/60Hz	50/60Hz		50 / 60 Hz
Auxiliary	100-120/220-240/380-440V AC ± 20%	100-120/220-240/380-440V AC ± 20%	Built-In from 3-Phase	Built-in
Output Contacts	1 CO	2 CO	1 CO	1 CO
Trip Setting (Volts)				
Phase Sequence	Yes	Yes	Yes	Yes
Phase Unbalance	40V ± 6V (fixed)	30V to 70V ± 6V (adjustable)	-	-
Trip Time Delay				
On Phase Failure/Unbalance	3.5 Sec. ± 1.5 Sec.	3.5 Sec. ± 1.5 Sec.	Instant	Instant
For level sensing	N.A.	N.A.	N.A.	N.A.
Resetting Mode	Auto	Auto/Manual / Remote	Auto Reset	Auto Reset
Weight	224 gms.	285 gms.	90 gms. (Approx.)	90 gms.
Dimensions (mm)				
Overall (L x W x D)	75.5 x 30 x 117	76 x 56.5 x 117	91 x 29 x 65 (Approx.)	49.5 x 39.5 x 68
Mounting (L x W)	68 centre to centre/35 mm rail Mounting	67 x 46 □/35 mm rail Mounting	35 mm rail Mounting	8 Pin Plug - In
• Wherever not specified Contact Rating: 5A @ 230 V AC (resistive) • *Available on request.				
				

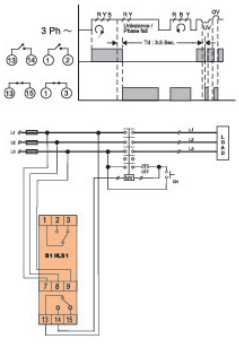
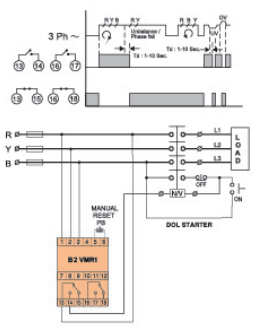
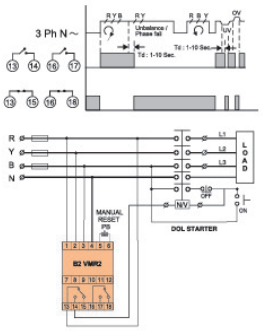
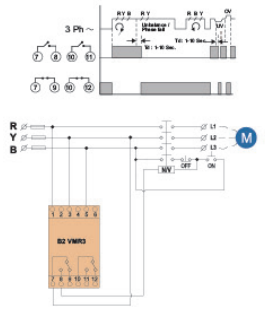
PHASE FAILURE RELAYS

Vaya

Model	BHLV B2 Phase Failure with UV/OV Relay	BLV B2 Phase Failure with UV/OV Relay	BMR B2 Phase Failure with UV/OV Relay
Product	 Phase Failure, Unbalance, Phase Sequence, under voltage, Over Voltage, Manual reset, Fixed Unbalance setting, Adjustable UV/OV settings, 2 CO output relay	 Phase Failure, Unbalance, Phase Sequence, under voltage, Over Voltage Auto Reset, Fixed Unbalance setting, Adjustable UV/OV settings, 2 CO output relay	 Phase Failure, Unbalance, Phase Sequence, under voltage, Over Voltage, Auto Reset, Fixed Unbalance setting, Adjustable UV/OV settings, 2 CO output relay
Supply Voltage			
System	110/240/380/415/440V AC ± 20% 50/60Hz	110/240/380/415/440V AC ± 20% 50/60Hz	110/220/230/240/380/415/440V AC ± 20% 50/60Hz
Auxiliary	110V(Fixed) or (220-230-240) or (380-415-440) V AC ± 20% selectable	110V (Fixed) or (220-230-240) or (380-415-440) V AC ± 20% selectable	110V (Fixed) or (220-230-240) or (380-415-440) V AC ± 20% selectable
Output Contacts	2 CO	2 CO	2 CO
Trip Setting (Volts)			
Phase Sequence	Yes	Yes	Yes
Phase Unbalance	40V ± 6V (fixed)	40V ± 6V (fixed)	94V ± 6V (fixed)
Under Voltage For 380-440V AC / For 220-240V AC / For 100-120V AC	80% to 95% (adjustable)	80% to 95% (adjustable)	80% to 95% (adjustable)
Over Voltage For 380-440V AC / For 220-240V AC / For 100-120V AC	105% to 120% (adjustable)	105% to 120% (adjustable)	105% to 120% (adjustable)
Trip Time Delay			
On Phase Failure	3.5 Sec. ± 1.5 Sec.	3.5 Sec. ± 1.5 Sec.	3.5 Sec. ± 1.5 Sec.
On UV/OV	Less than 2 Sec. for OV & 2-5 Sec. for UV	Less than 2 Sec.	Less than 2 Sec.
Resetting Mode	Manual/Remote	Auto Reset	Auto Reset
Weight	295 gms.	290 gms.	290 gms.
Dimensions (mm)			
Overall (L x W x D)	76 x 56.5 x 117	76 x 56.5 x 117	76 x 56.5 x 117
Mounting (L x W)	67 x 46 ⬚ /35 mm rail Mounting	67 x 46 ⬚ /35 mm rail Mounting	67 x 46 ⬚ /35 mm rail Mounting
• Wherever not specified Contact Rating: 5A @ 230 V AC (resistive) • *CE marked products available on request.			

PHASE FAILURE RELAYS

Vaya

Model	B1 HLS1 Phase Failure with UV/OV Relay	B2 VMR1 Phase Failure with UV/OV (3Ø-3W)	B2 VMR2 Phase Failure with UV/OV (3Ø-4W)	B2 VMR3 Phase Failure with UV / OV Relay
Product				
	Suitable for 3 Ø-3W system, Microcontroller design, SMD Technology, Phase Failure, Unbalance, Phase Sequence, under voltage, Over Voltage, Auto reset, Fixed Unbalance setting, Fixed UV/OV settings, 2 CO output relay	Suitable for 3 Ø-3W system, Microcontroller design, SMD Technology, Absolute values of UV/OV settings, Phase Failure, Unbalance, Phase Sequence, under voltage, Over Voltage, Auto/Manual reset, Adjustable settings for Unbalance, UV/OV and trip delays,	Suitable for 3 Ø-4W system, Microcontroller design, SMD Technology, Absolute values of UV/OV settings Phase Failure, Unbalance, Phase Sequence, under voltage, Over Voltage Auto/Manual reset, Adjustable settings for Unbalance, UV/OV and trip delays, Neutral Fail, 2 CO output relay	Microcontroller design, SMD Technology, Absolute values of UV/OV settings, Phase Failure, Unbalance, Phase Sequence, under voltage, Over Voltage Auto/Manual reset, Adjustable settings for Unbalance, UV/OV and trip delays, 2 CO output relay
Supply Voltage	100-110-120/220-230-240/380-415-440V AC	100-120 / 220-240 / 380-440V AC -25%+20%	100-120 / 220-240 / 380-440V AC -25%+20%,	100-120 / 220-240 / 380-440V AC -25%+20%,
System	±20% 48-63 Hz,	48-63 Hz	48-63 Hz	48-63 Hz
Auxiliary	Built In (from 3 Phases)	Built In (from 3 Phases)	Built In (from 3 Phases)	Built In (from 3 Phases)
Output Contacts	2 CO	2 CO	2 CO	2 CO
Trip Setting (Volts)				
Phase Sequence	Yes	Yes	Yes	Yes
Phase Unbalance	10% (fixed)	4%-20% [Variable]	4%-20% [Variable]	4 % - 20 % [Variable]
Under Voltage For 380-440V AC	75% of system supply (Fixed)	285-425V AC [Variable]	165-245V AC [Variable]	285-425V AC [Variable]
Under Voltage For 220-240V AC		165-225V AC [Variable]	95-135V AC [Variable]	165-225V AC [Variable]
Under Voltage For 100-120V AC		75-115V AC [Variable]	45-65V AC [Variable]	75-115V AC [Variable]
Over Voltage For 380-440V AC	120% of system supply (Fixed)	400-520V AC [Variable]	230-310V AC [Variable]	400-520V AC [Variable]
Over Voltage For 220-240V AC		230-290V AC [Variable]	130-170V AC [Variable]	230-290V AC [Variable]
Over Voltage For 100-120V AC		105-145V AC [Variable]	60-80V AC [Variable]	105-145V AC [Variable]
Trip Time Delay				
On Phase Sequence	2~5 Sec. (Fixed)	Instant	Instant	Instant
On SP/UV/OV	Less than 2 Sec.	1 To 10 Sec. [Variable)	1 To 10 Sec. [Variable]	1 To 10 Sec. [Variable]
Resetting Mode	Auto	Auto/ Manual Reset (External NC Push Buttons)	Auto/ Manual Reset (External NC Push Buttons)	Auto/ Manual Reset [Selectable]
Weight	140 gms.	192 gms.	160 gms.	110 gms (Approx.)
Dimensions (mm)				
Overall (L x W x D)	75.5 x 30 x 117	76 x 56.5 x 117	76 x 56.5 x 117	91 X 35 X 64
Mounting (L x W)	68 centre to centre/35 mm rail Mounting	67 x 46 □ /35 mm rail Mounting	67 x 46 □ /35 mm rail Mounting	35 mm Rail Mounting
• Wherever not specified Contact Rating: 5A @ 230 V AC (resistive)				

Vaya

MONITORING RELAYS

These relays are best suitable for monitoring balanced or unbalanced supplies, either of single phase, 3-phase 3-wire or 3-phase 4 wire loads powered by generators, UPS, stabilizers, inverters, or Mains (by Electricity Boards / Utilities); in AMF panels, PCCs, distribution boards and for power monitoring of individual loads / motors / pumps.

MODELS

B1 VCR1	**BUVT B1**
BCT B2	**BUVF B1**
BCF B2	**BOCS B1**
B2 VCT1	

FEATURES

- Fixed/adjustable under/Over trip settings for parameters.
- Fixed/adjustable trip delays and Power On delays
- Built-in or external power supply
- Resetting – Auto or Manual
- Output contacts : 1 CO or 2 CO
- Choice of enclosures (DIN-Rail, Flush)
- Models with Micro-Controller based design
- Use of SMD Technology
- User-friendly LED indications

PROTECTIONS / FUNCTIONS

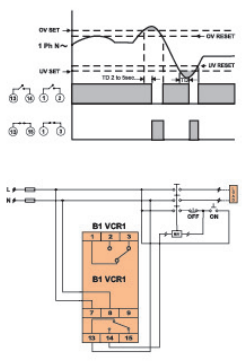
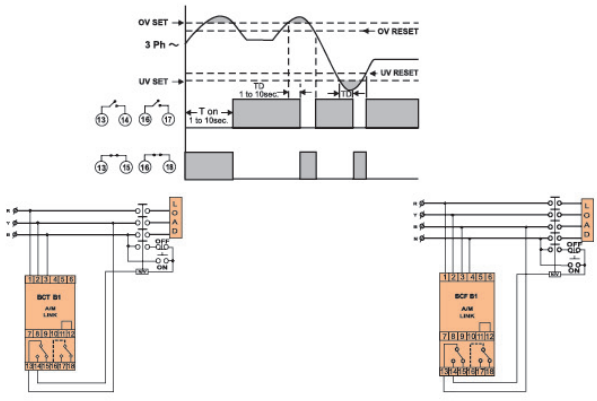
- Under/over Voltage,
- Under/Over Current
- Under/Over Frequency
- Reverse Power

Ordering Instructions

- ✓ Product Family Name
- ✓ Model Name
- ✓ System Supply Voltage & frequency
- ✓ Aux. Supply/Control supply voltage
- ✓ Current input (1A or 5A)

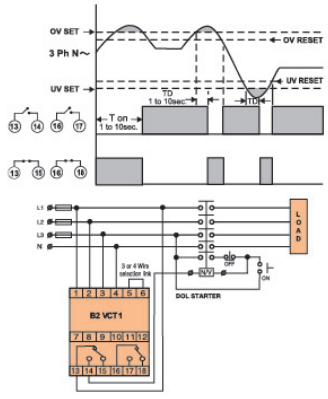
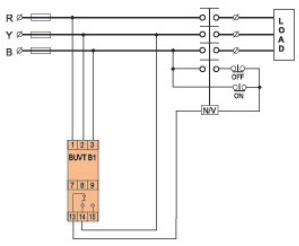
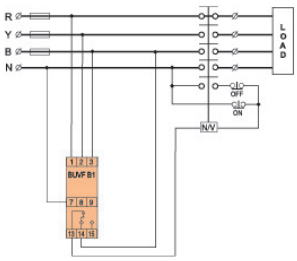
VOLTAGE MONITORING RELAYS

Vaya

Model	B1 VCR1 1 Phase Voltage Monitoring Relay	BCT B2 Voltage Monitoring Relay, 3Ø-3W	BCF B2 Voltage Monitoring Relay, 3Ø-4W
Product			
	Single Phase Under & Over voltage, Auto Reset, Adjustable under / over voltage settings, 2 CO output relay	3-Phase 3-Wire Under& Over voltage Auto/Manual Reset, Adjustable under/over voltage settings, adjustable trip delay & ON delay, 2 CO output relay	3-Phase 4-Wire Under & Over voltage Auto/Manual Reset, Adjustable under/over voltage settings, adjustable trip delay & ON delay, 2 CO output relay
System Supply	220/230/240 V AC (+20%-30%), 50/60 Hz ± 3%	110/240/380/415/440 V AC +20%, –25% 50/60Hz	110/240/380/415/440 V AC +20%, –25% 50/60Hz
Output Relay Contact	2 CO	2 CO	2 CO
Trip Setting			
Under Voltage	75-95% [Variable] of set value	75-95% [Variable] of set value	75-95% [Variable] of set value
Over Voltage	105-120% [Variable] of set value	105-120% [Variable] of set value	105-120% [Variable] of set value
Trip Time Delay	2-5 Sec. (Fixed) (UV/OV)	1-10 Sec. (adjustable)	1-10 Sec. (adjustable)
Power on Delay		1-10 Sec. (adjustable)	1-10 Sec. (adjustable)
Reset	Auto Reset	Auto/Manual	Auto/Manual
Weight	140 gms.	291 gms.	285 gms.
Dimensions (mm)			
Overall (L x W x D)	75.5 x 30 x 117	76 x 56.5 x 117	76 x 56.5 x 117
Mounting	68 mm centre to centre/35 mm rail mounting	67 x 46 □/35 mm rail mounting	67 x 46 □/35 mm rail mounting
• Wherever not specified Contact Rating: 5A @ 230 V AC (resistive)			

VOLTAGE MONITORING RELAYS

Vaya

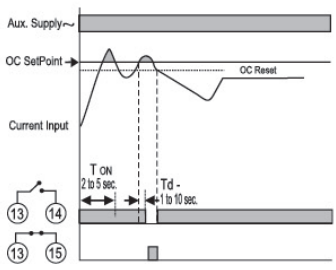
Model	B2 VCT1 Voltage Monitoring Relay	BUVT B1 Voltage Monitoring Relay	BUVF B1 Voltage Monitoring Relay
Product	 3-Phase 3-Wire and 3-Phase 4-Wire (selectable) Under & Over voltage, Microcontroller based design, Auto/Manual Reset, Adjustable under/over voltage settings, Absolute values for UV/OV, adjustable trip delay & ON delay, 2 CO output relay (or selectable 1CO for UV, 1CO for OV) Programming Mode, Failsafe-non-failsafe selectable	 3-Phase 3-Wire Under Auto Reset, Adjustable under voltage settings, adjustable trip delay & ON delay, 1 CO output relay	 3-Phase 4-Wire Under Auto Reset, Adjustable under voltage settings, adjustable trip delay & ON delay, 1 CO output relay
System Supply	100-120/220-240/380-440 V AC –25% +20%, 48-63Hz	110/220/230/240/380/415/440 V AC +20%, –25% 50/60Hz	110/220/230/240/380/415/440 V AC +20%, –25% 50/60Hz
Output Relay Contact	1 CO+1 CO/ 2CO	1 CO	1 CO
Trip Setting			
Under Voltage	**Ph Ph Setting:** For 380-440V AC: 285-425V AC (Variable) For 220-240V AC: 165-225V AC (Variable) For 100-120V AC: 75-115V AC (Variable) **Ph N Setting:** For 380-440V AC: 165-245V AC (Variable) For 220-240V AC: 95-135V AC (Variable) For 100-120V AC: 45-65V AC (Variable)	75-95% [Variable] of set value	75-95% [Variable] of set value
Over Voltage	**Ph Ph Setting:** For 380-440V AC: 400-520V AC (Variable) For 220-240V AC: 230-290V AC (Variable) For 100-120V AC: 105-145V AC (Variable) **Ph N Setting:** For 380-440V AC: 230-310V AC (Variable) For 220-240V AC: 130-170V AC (Variable) For 100-120V AC: 60-80V AC (Variable)		
Trip Time Delay	1-10 Sec. (Variable) UV/OV/NF	1-10 Sec. (adjustable)	1-10 Sec. (adjustable)
Power on Delay	1-10 Sec. (Variable)	3.5 Sec. ± 1.5 Sec. (Fixed)	3.5 Sec. ± 1.5 Sec. (Fixed)
Reset	Auto/ Manual Reset(PRG/RST Buttons)	Auto	Auto
Weight	160 gms (Approx.)	224 gms.	224 gms.
Dimensions (mm)			
Overall (L x W x D)	76 x 56.5 x 117	75.5 x 30 x 117	75.5 x 30 x 117
Mounting	67 x 46 ⊓ /35 mm rail mounting	68 centre to centre/35 mm rail Mounting	68 centre to centre/35 mm rail Mounting
• Wherever not specified Contact Rating: 5A @ 230 V AC (resistive)			

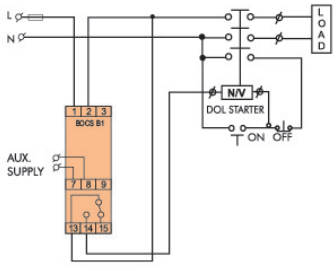
CURRENT MONITORING RELAYS

Vaya

Model	BOCS B1 1 Phase Over Current Relay	CTS Current Sensor
Product	 Single phase over current Auto reset, Input 1A or 5 A through CT, Adjustable over current trip settings, Adjustable trip delay, 1 CO output relay	 Current sensor suitable for full, load motor current of 1.25A, 2.5A, 5A, 10A, To be used with Vaya relays only.
Supply Voltage		
System	110-120/220-240/380-440V Ac ± 20%,	N.A.
Auxiliary	12V DC/24/30V DC ± 10%	N.A.
Ext. Input	1 Amp/5 Amp (Secondary) CT or 250/500 mA	N.A.
Output Contact	1 CO	N.A.
Trip Setting (Volts)		
EF Trip Setting	-	-
Under Current	N.A.	N.A.
Over Current	50% -140% (adjustable) of CT sec	N.A.
Power On Delay	3.5 Sec. ± 1.5 Sec. (fixed)	N.A.
Trip Time Delay	1-10 Sec. (adjustable)	N.A.
Resetting	Auto	N.A.
Weight	175 gms.	220 gms.
Dimensions (mm)		
Overall (L x W x D)	75.5 x 30 x 117	75.5 x 30 x 117
Mounting (L x W)	68 centre to centre/35 mm rail Mounting	68 centre to centre/35 mm rail Mounting

• Wherever not specified
Contact Rating:
5A @ 230 V AC
(resistive)

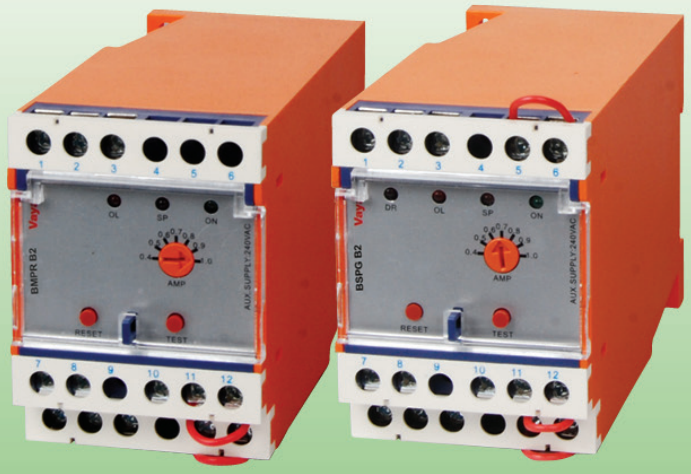




Selection Chart for CTS

HP	KW	Amp	CTS Model
<0.75	<0.5	0.5-1.25	CTS/1.25
<1.75	<1.30	1-2.5	CTS/2.5
<3	<2.25	2-5	CTS/5
<6	<4.5	4-10	CTS/10

MOTOR/PUMP PROTECTION RELAYS



These relays are useful for protection of 3-phase AC induction motors against various hazards. With their unique advantages they eliminate use of a thermal/bimetal relay for motor protection. Being current sensing, they are to be selected according to motor rating and are available for practically all ranges of motors. These relays are ideally suitable for Air-conditioning Compressor motor protection, as also for motors in machines, conveyors, cranes/hoists and lifts, and for pumps.

MODELS

BMPR B2
BSPG B2
B2 CTS1

FEATURES

- Fixed/adjustable unbalance settings
- Fixed/adjustable settings for under/over voltage, current, load
- Fixed/adjustable trip delays
- Resetting Auto or Manual
- Output contacts : 1 CO or 2 CO
- Choice of enclosures (DIN-Rail, Flush)
- Models with Micro-Controller based design
- Use of SMD Technology
- User-friendly LED indications

PROTECTIONS / FUNCTIONS

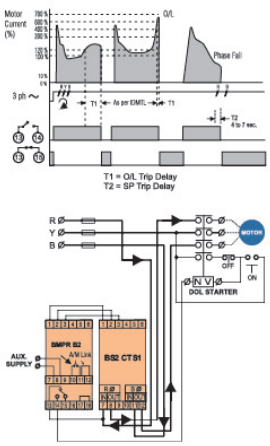
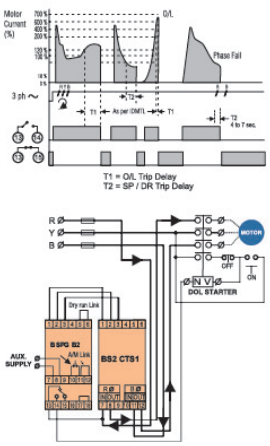
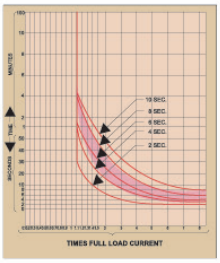
- Phase Failure (Phase Loss/Single Phasing),
- Phase sequence reversal,
- Voltage Unbalance,
- Under Voltage, Over Voltage
- Overload protection as per motor IDMTL characteristics
- No-load/dry running
- Motor Winding overheating
- Over-current/Short circuit/locked rotor

Ordering Instructions

- ✓ Product Family Name
- ✓ Model Name
- ✓ System Supply Voltage & frequency
- ✓ Aux. Supply/Control supply voltage
- ✓ Motor/Pump rating (HP/KW) & duty
- ✓ Overload characteristics required
- ✓ No. of PTCs & Temp. graph

MOTOR/PUMP PROTECTION RELAYS

Vaya

Model	BMPR B2 Overload Protection Relay with Phase Failure	BSPG B2 Dry Run & Overload Protection Relay with Phase Failure	B2 CTS1 Current Sensor
Product			
	Phase Failure, Unbalance, Phase sequence and overloading Auto / Manual Reset, Adjustable current trip settings, selectable characteristics, 1CO/2CO output relay	Phase Failure, Unbalance, Phase sequence, Overloading & Dry running Auto/Manual Reset, Adjustable current trip settings, selectable overload characteristics, 1CO/2CO output relay	Current sensor suitable for full, load motor current of 1.25A, 2.5A, 5A, 10A, 20A, 40A & 80A To be used with Vaya relays only.
Supply Voltage			
System	100-120/220-240/380-440 V AC ± 20%	100-120/220-240/380-440 V AC ± 20%	N.A.
Auxiliary	110/240/380/415V AC/DC/ 24V AC/DC ± 20%, 50/60 Hz	110/240/380/415/440V AC/DC/24V AC/DC ± 20%, 50/60 Hz	N.A
Output Relay Contact	1 CO (2 CO)	1 CO (2 CO)	3-wire Output
Input	From CTS	From CTS	From CTS
Trip Setting			
Phase to phase unbalance	50% of motor Current ± 10%	50% of motor Current	N.A.
Under current (Dry running)	N.A.	50%/75% of set current	N.A.
Overload	Above 120% of set Current (IDMTL)	Above 120% of set Current (IDMTL)	N.A.
UV/OV	N.A.	N.A.	N.A.
Trip Time Delay			
On Phase Failure	5.5 Sec. ± 1.5 Sec.	5.5 Sec. ± 1.5 Sec.	N.A.
For Overloading	As per selectable inverse time Characteristics (2 Sec. / 5 Sec.) or 10 Sec. or 15 Sec. or 20 Sec. (optional)	As per selectable inverse time Characteristics 2 / 5 secs (10 Sec.)	N.A.
UV/OV RP	N.A.	N.A.	N.A.
Resetting	Auto / Manual / Remote	Auto / Manual / Remote	
Dimensions (mm)			
Overall (L x W x D)	76 x 56.5 x 117	76 x 56.5 x 117	91 x 35.5 x 60
Mounting (L x W)	67 x 46 □ /35 mm rail Mounting	67 x 46 □ /35 mm rail Mounting	35 mm Rail Mounting
Weight	284 gms.	280 gms.	150 gms.
• Wherever not specified Contact Rating: 5A @ 230 V AC (resistive)			Selection Chart for B2 CTS1 HP | KW | Amp | B2 CTS1 Model <0.75 | <0.5 | 0.5-1.25 | B2 CTS1/1.25 <1.75 | <1.30 | 1-2.5 | B2 CTS1/2.5 <3 | <2.25 | 2-5 | B2 CTS1/5 <6 | <4.5 | 4-10 | B2 CTS1/10 <12.5 | <9.4 | 8-20 | B2 CTS1/20 <30 | <22.5 | 16-20 | B2 CTS1/40 <60 | <45 | 32-80 | B2 CTS1/80 

LIQUID LEVEL CONTROLLERS

These are suitable for conductive liquids like waterand for non-conductive liquids like Diesel/Oil. Models for either one level monitoring or two level monitoring.

MODELS

BWLC B1

FEATURES

- Can be used for potable water, water with impurities and for diesel/oil
- Cable size & length no restriction for water level monitoring
- Suitable for variety of electrodes
- Optical sensing for diesel/oil level monitoring
- Choice of enclosures (DIN-Rail, & Plug-in)

Ordering Instructions

- ✓ Product Family Name
- ✓ Model Name
- ✓ System Supply Voltage
- ✓ Aux. Supply/Control supply voltage
- ✓ Type of liquid & its specifications

PROTECTIONS / FUNCTIONS

- Level monitoring of conductive and non-conductive liquids
- One level or two level monitoring
- One tank or two tank level monitoring

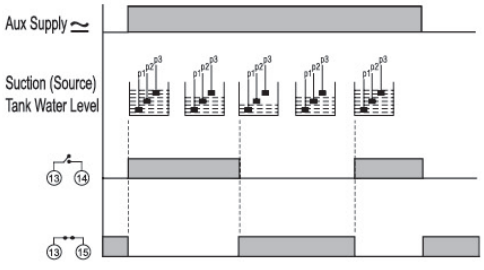
LEVEL CONTROLLERS-CONDUCTIVE LIQUIDS

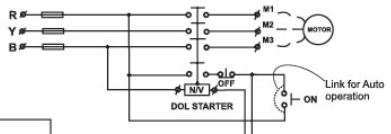
Vaya

Model	BWLC B1 Water Level Control Relay Two Level Single Tank
Product	 Single tank - 2 level control relay, suitable for conductive liquids, sensitivity adjustment, 1CO output relay. Also can be used as moisture control relay.

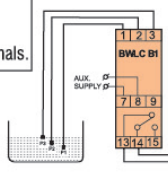
Auxiliary Supply		24 VAC/DC/100-120/220-240/380-440 V AC ± 10%, 50 / 60 Hz
Output Contacts		1 CO
Input Sensors		3 Electrodes
Sensitivity		1KΩ - 200 KΩ (adjustable)
Trip Time Delay		Less than 1 Sec.
Weight		
	Unit	217 gms.
	Sensor (each)	50 gms.
Dimensions (mm)		
Unit		
	Overall (L x W x D)	75.5 x 30 x 117
	Mounting (L x W)	68 mm centre to centre / 35 mm rail mounting
Sensor (mm)		
	Overall	24 (Dia) x 76 (L)

• Wherever not specified
Contact Rating:
5A @ 230 V AC
(resistive)





Moisture control relay connection:
- Short 1 & 3 terminals.
- Connect sensor wires at 1 & 2 terminals.



PRODUCTS FOR AGRI SECTOR

Vaya offers a range of products for protection of water pumps used by farmers. These are primarily to monitor incoming 3-phase supply for Single Phasing, Reverse Phasing and unbalanced supply and stop the pump in case of any fault. Additional features in some models include auto restarting.The products are specifically produced formarketing and use in India only.

MODELS

BSP2

FEATURES

- Monitor incoming 3-phase supply
- Models with pre-wired connections
- Easy to fit inside most motor starters
- Switch for Auto-Manual operations
- Switch provision either built-in or external
- Adjustable on time delay
- All protections in auto & manualmodes
- Built-in timer for star-delta operation

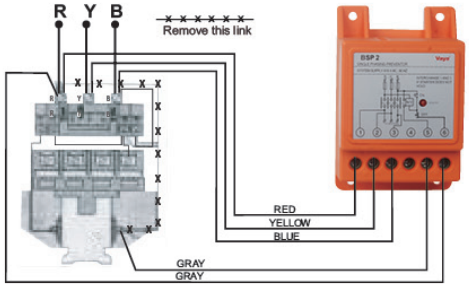
PROTECTIONS / FUNCTIONS

- Single Phasing
- Reverse Phasing
- Unbalanced supply
- Dry running
- On Delay to avoid immediate restarting of pumps during auto mode

Ordering Instructions

- ✓ Product Family Name
- ✓ Model Name
- ✓ System Supply Voltage
- ✓ Aux. Supply / Control supply voltage
- ✓ Motor rating (HP / KW)
- ✓ Motor applications

Model	BSP2
Product	Smallest size of single phasing preventor Single phasing, reverse phasing, unbalanced supply Auto reset, 1 NO output contact Suitable for any HP/kW rating monoblock pumps
Supply Voltage	415 VAC ± 20%, 50 Hz ± 3%
Output Relay Contact	1 NO
Output Contact Rating	5 Amp, 240 VAC (RESISTIVE)
Unbalance Trip Setting	40 V ± 6 V
Trip Time Delay	
For unbalance	3.5 sec. ± 1.5 sec.
Dry Run Setting	N.A.
On Time Delay	N.A.
Star-Delta Changeover Time Delay	N.A.
Resetting	Auto Reset
Auto Switch	N.A.
Enclosure	HIP moulded, with Nylon connector strip
Dimensions (mm)	
Overall (H x W x D)	102.5 x 65.5 x 43
Mounting	91 x 48
Mounting	Panel Mounting
Weight	260gms
Level sensor	
Quantity	—
Dimensions	—
Operating Conditions	
Temperature	-5℃ TO + 60 ℃
Humidity	Upto 95% Rh



Vaya