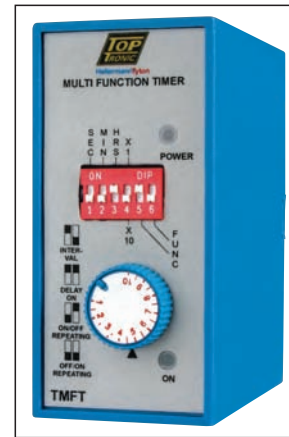
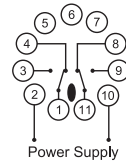


Multifunction Timer

- TMFT12D - 12V AC/DC Multifunction Timer
- TMFT24D - 24V AC/DC Multifunction Timer
- TMFT11A* - 110V AC Multifunction Timer
- TMFT23A - 230V AC Multifunction Timer
- TMFT40A - 400V AC Multifunction Timer

Technical Table

MODEL	
Time Ranges (Switch Selectable)	
0.1 - 1 second	1 - 10 seconds
0.1 - 1 minute	1 - 10 minutes
0.1 - 1 hour	1 - 10 hours
FUNCTION	
• Delay-On	• Interval
	• Equal-Repeating ON/OFF
	• Equal-Repeating OFF/ON
DESCRIPTION OF OPERATION	
When power is applied the relay remains de-energised. After the pre-set time, the relay energises. Remove power to reset.	When power is applied the relay energises. After the pre-set time, the relay de-energises. Remove power to reset.
	When power is applied the relay will switch ON and OFF continuously. The pre-set time is the same for both cycles. Remove power to reset.
	When power is applied the relay will remain OFF, then switch ON and OFF continuously. The pre-set time is the same for both cycles. Remove power to reset.
VOLTAGE RANGES	
12V AC/DC, 24V AC/DC, 230V AC, 400V AC	110V AC available on request



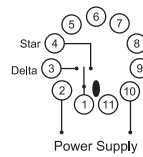
TMFT range

Star Delta Timer

- TSDT2330S - 230V 30 sec Star Delta Timer
- TSDT4030S - 400V 30 sec Star Delta Timer

Technical Table

MODEL	
• 0 - 30 seconds	
DESCRIPTION OF OPERATION	
When power is applied a neutral contact closes between 1 + 4 for a "STAR" contactor connection. After a pre-set time, this contact opens and pauses in the neutral (open) position. After 25MS the contact closes between 1 + 3 for a "DELTA" contactor connection. This contact remains in this closed position until power is removed.	
VOLTAGE RANGES	
230V AC, 400V AC	12V, 24V AC/DC, 110V AC available on request



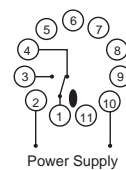
TSDT range

Delay on Timer

- TDT236S - 230V 6 sec Delay on Timer
- TDT2360S - 230V 60 sec Delay on Timer
- TDT236M - 230V 6 min Delay on Timer
- TDT2360M - 230V 60 min Delay on Timer
- TDT2460M* - 240V 60 min Delay on Timer
- TDT2460SAC - 24V AC 60 sec Delay on Timer
- TDT406S* - 400V 6 sec Delay on Timer
- TDT4060S* - 400V 60 sec Delay on Timer
- TDT406M - 400V 6 min Delay on Timer
- TDT4060M - 400V 60 min Delay on Timer
- TDT2460S - 24V DC 6 sec Delay on Timer
- TDT1160M - 110V 60 min Delay on Timer

Technical Table

MODEL	
Time Ranges	
0.3 - 6 seconds	3 - 60 seconds
0.3 - 6 minutes	3 - 60 minutes
DESCRIPTION OF OPERATION	
When power is applied the relay remains de-energised. After the pre-set time, the relay energises. Remove power to reset.	
VOLTAGE RANGES	
230V AC, 400V AC, 24V DC	12V, 24V AC/DC, 110V AC available on request



TDT range

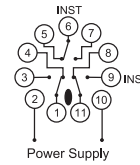
* Minimum order quantities may apply

Delayed On + Instantaneous Timer

- TDTI160M** - 160V 6 min Delay on Timer + Instant
- TDTI2365*** - 230V 6 sec Delay on Timer + Instant
- TDTI2360S** - 230V 60 sec Delay on Timer + Instant
- TDTI236M*** - 230V 6 min Delay on Timer + Instant
- TDTI2360M** - 230V 60 min Delay on Timer + Instant
- TDTI260S** - 260V 6 sec Delay on Timer + Instant
- TDTI26M** - 260V 6 min Delay on Timer + Instant
- TDTI4065*** - 400V 6 sec Delay on Timer + Instant
- TDTI4060S*** - 400V 60 sec Delay on Timer + Instant
- TDTI406M*** - 400V 6 min Delay on Timer + Instant

Technical Table

MODEL	
Time Ranges	
0.3 - 6 seconds	3 - 60 seconds
0.3 - 6 minutes	3 - 60 minutes
FUNCTION	
• Delay-On	• DPDT contacts
• PLUS 2 Instant	
DESCRIPTION OF OPERATION	
Operation as per TDT timer, but on power up, two DPDT contacts switch immediately.	
Remove power to reset.	
VOLTAGE RANGES	
230V AC, 400V AC	12V, 24V AC/DC, 110V AC available on request



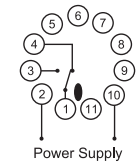
TDTI range

Interval - Delayed off with Power Timer

- TIT2365*** - 230V 6 sec int, Delay off with power
- TIT2360S** - 230V 60 sec int, Delay off with power
- TIT236M*** - 230V 6 min int, Delay off with power
- TIT2360M*** - 230V 60 min int, Delay off with power
- TIT236H*** - 230V 6 hour int, Delay off with power
- TIT2460S*** - 240V 6 sec int, Delay off with power
- TIT4065*** - 400V 6 sec int, Delay off with power
- TIT4060S** - 400V 6 sec int, Delay off with power
- TIT406M*** - 400V 6 min int, Delay off with power
- TIT4060M*** - 400V 60 min int, Delay off with power
- TIT406H*** - 400V 6 hour int, Delay off with power
- TIT1260S** - 12V 60 sec int, Delay off with power

Technical Table

MODEL	
Time Ranges	
0.3 - 6 seconds	3 - 60 seconds
0.3 - 6 minutes	3 - 60 minutes
0.3 - 6 hours	
FUNCTION	
• Interval Timer - Delay-Off with Power On	
DESCRIPTION OF OPERATION	
When power is applied the relay energises. After the pre-set time, the relay de-energises.	
Remove power to reset.	
VOLTAGE RANGES	
230V AC, 400V AC	12V, 24V AC/DC, 110V AC available on request



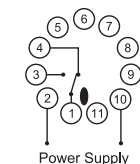
TIT range

Equal Repeat Timer

- TERT236S** - 230V 6 sec equal repeat timer
- TERT2360S** - 230V 60 sec equal repeat timer
- TERT236M*** - 230V 6 min equal repeat timer
- TERT2360M*** - 230V 60 min equal repeat timer
- TERT126S*** - 12V 0,326 sec equal repeat timer

Technical Table

MODEL	
Time Ranges	
0.3 - 6 seconds	3 - 60 seconds
0.3 - 6 minutes	3 - 60 minutes
DESCRIPTION OF OPERATION	
When power is applied the relay will switch ON and OFF continuously. The pre-set time is the same for both cycles. This cycling continues until power is removed.	
VOLTAGE RANGES	
230V AC, 12V	12V, 24V AC/DC, 110V, 400V AC available on request



TERT range

* Minimum order quantities may apply

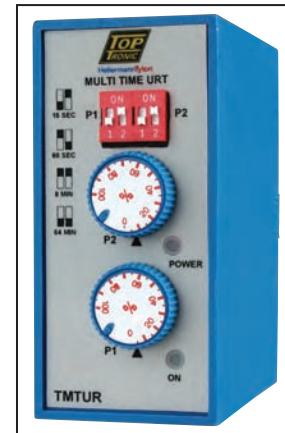
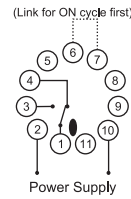


Multi Time Unequal Timer

TMTUR12* - 120V Multi Time Unequal Repeat **TMTUR24*** - 240V Multi Time Unequal Repeat
TMTUR23 - 230V Multi Time Unequal Repeat **TMTUR40** - 400V Multi Time Unequal Repeat

Technical Table

MODEL	
Time Ranges Selectable 15 & 60 seconds 8 & 64 minutes	
FUNCTION	
• Unequal-Repeating Timer with ON or OFF first	• Link pins 6+7 for ON first.
DESCRIPTION OF OPERATION	
When power is applied the relay will remain de-energised for the 1st pre-set time after which the relay will energise for the 2nd pre-set time period, then switch OFF. This cycling continues until power is removed. (No Link on 6+7).	
Each adjusting pot has 2 DIP switches, which can be configured to offer 4 time ranges each. Eg: Pot 1 = 15 sec Pot 2 = 64 min	
Extended time ranges available on order.	
VOLTAGE RANGES	
230V AC, 400V AC	12V, 24V AC/DC, 110V AC available on request



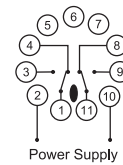
TMTUR range

No Power Delayed Off Timer

TNPDFT2360S - 230V 60 sec No power delay off timer **TNPDFT246M** - 24V 6 min No power delay off timer
TNPDFT236M - 230V 6 min No power delay off timer **TNPDFT126M*** - 120V AC 6 min No power delay off timer
TNPDFT2460S - 240V 60 sec No power delay off timer **TNPDFT1260S** - 120V 60 sec No power delay off timer
TNPDFT4060S* - 400V 60 sec No power delay off timer

Technical Table

MODEL	
Time Ranges 0.3 - 6 seconds 3 - 60 seconds 0.3 - 6 minutes	
DESCRIPTION OF OPERATION	
When power is applied the relay will switch ON. When power is removed the relay remains ON until the pre-set time has lapsed.	
Note: The timer must be energised for 50% of the preset time.	
VOLTAGE RANGES	
230V AC, 400V AC, 12V, 24V AC	110V AC available on request



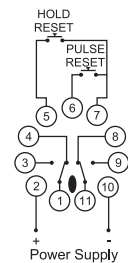
TNPDFT range

Interval Reset Timer

TIRT2360S - 230V 60 sec Interval Reset Timer **TIRT2460S** - 24V DC 60 sec Interval Reset Timer
TIRT236MIN - 230V 6 min Interval Reset Timer **TIRT1160S** - 110V DC 60 sec Interval reset Timer

Technical Table

MODEL	
(Pulse Reset)	(Hold Reset)
Time Ranges 0.3 - 6 seconds 0.3 - 6 minutes	
3 - 60 seconds	3 - 60 minutes
FUNCTION	
• Interval Timer with Pulse Reset. A contact closes momentarily between pins 6 + 7. (eg: N/O Button)	• Interval Timer with Hold Reset. A contact closes and holds between pins 5 + 7.
DESCRIPTION OF OPERATION	
Pulse Reset: The relay remains de-energised on power up until a reset occurs. When the pulse contact is closed the relay energises for the set time period then switches OFF irrespective of the length of the pulse. A string of pulses that are shorter than the set time period will reset the timer and the relay will remain energised until the last pulse occurs when the timing cycle will time out and the relay will de-energise until the next reset pulse occurs.	Hold Reset: The relay remains de-energised on power up until a reset occurs. When the reset contact closes the relay energises. When the reset contact opens the relay de-energises after the pre-set time. The relay stays de-energised until another reset occurs. If the hold contact is closed before the time period has elapsed the time cycle is cancelled and the relay will remain energised.
VOLTAGE RANGES	
230V AC, 24V DC	12V AC/DC, 110V, 400V AC available on request



TIRT range

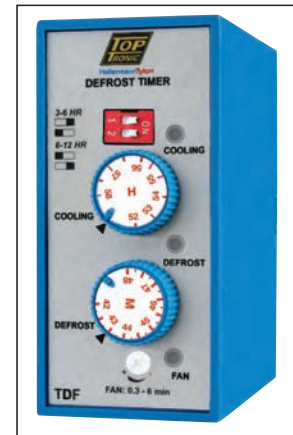
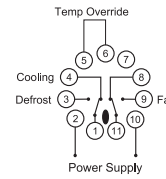
* Minimum order quantities may apply

Defrost Timer

TDF23 - 230V Defrost timer

TDF40 - 400V Defrost timer

Technical Table		
MODEL		
Time Ranges		
<u>Cooling</u>	<u>Defrost</u>	<u>Fan</u>
3 - 6 hours 6 - 12 hours	3 - 60 minutes	0.3 - 6 minutes
DESCRIPTION OF OPERATION		
The unit has two cooling cycle ranges which are selectable: 3-6 hours, and 6-12 hours. On power-up, with terminals 5+6 linked, the timer starts the cooling cycle. After a 0,3-6 minute pause, the fan operation starts.		
The cooling duration is set for a time: 3-12 hours. After the set cooling time, the defrost cycle starts, which can be set for a duration of 3-60 minutes. During this cycle the fan control is also switched off. After the defrost cycle has elapsed, the cooling cycle restarts, but without the fan operation. The fan will restart after the set period of 0,3 to 6 minutes.		
If the link between pins 5+6 is disconnected, the unit will remain in the cooling/fan mode. If reconnected the defrost cycle will once again be operational. Three LED's indicate the status of either cooling, fan or defrost.		
VOLTAGE RANGES		
230V AC, 400V AC	12V, 24V AC/DC, 110V AC available on request	



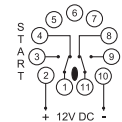
TDF range

Three Start Attempt Relay Timer

TTSAR12 - 12V Three start attempt relay

TTSAR24* - 24V Three start attempt relay

Technical Table	
MODEL	
Time Ranges	
0 - 30 seconds Other times on request.	
DESCRIPTION OF OPERATION	
To start generating sets up to a maximum of 3 attempts. On power up the relay energises for the pre-set time. With a successful start the power must be removed. On failure to start the relay de-energises for the same pre-set time. The second and third attempt will be made in the same manner. If failure persists after 3 attempts an alarm relay is energised.	
VOLTAGE RANGES	
12V DC, 24V DC	110V AC available on request



TTSAR range

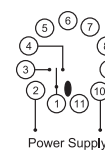
Forward Reverse with Pause Timer

TFRTP11 - 110V Forward reverse timer

TFRTP23 - 230V Forward reverse timer

TFRTP40* - 400V Forward reverse timer

Technical Table		
MODEL		
Time Ranges		
0.3 - 6 seconds	3 - 60 seconds	
0.3 - 6 minutes	3 - 60 minutes	
0.3 - 6 hours	3 - 60 hours	
FUNCTION		
• Forward Reverse Timer + Pause		
DESCRIPTION OF OPERATION		
When power is applied there is a delay before contacts 1+4 close. Contacts 1+4 then remain closed for the "Forward" (ON) time period. After this time, contacts 1+4 then open. After an adjustable pause time (OFF period), contacts 1+3 close and remain closed for the "Reverse" (ON) time. The forward and reverse time periods are the same. After the reverse time, the unit goes into pause mode again. This forward, pause, reverse cycle is repeated until power on terminals 2+10 is removed.		
VOLTAGE RANGES		
230V AC, 400V AC	12V, 24V AC/DC, 110V AC available on request	



TFRTP range

* Minimum order quantities may apply

One Shot Timer

- TOST11* - 110V one shot timer
- TOST23 - 230V one shot timer
- TOST40* - 400V one shot timer

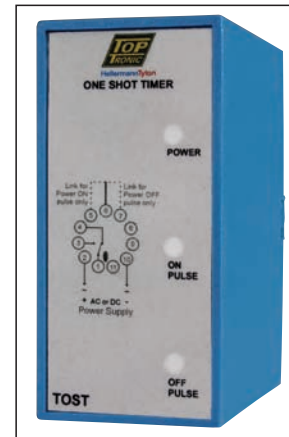
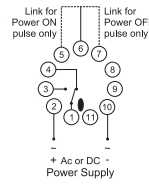
Technical Table

DESCRIPTION OF OPERATION

On power-up with terminals 5+6 linked, the relay will energise for a set period of 0,5 seconds (ON pulse).
 On power-up with terminals 6+7 linked, the relay will not energise. Only after power is removed will the relay energise for 0,5 seconds (OFF pulse).
 A pulse for Power-ON and Power-OFF is possible by leaving terminals 5,6+7 all disconnected (no links fitted).

VOLTAGE RANGES

230V AC, 400V AC 12V, 24V AC/DC, 110V AC available on request



TOST range

Voltage Window Comparitor (Single Phase)

- TVWC23 - 230V Voltage Window Comparitor
- TVWC40 - 400V Voltage Window Comparitor
- TVWC11* - 110V Voltage Window Comparitor

Technical Table

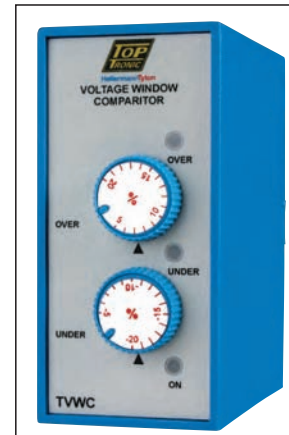
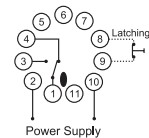
DESCRIPTION OF OPERATION

The "VWC" monitors its own supply and responds to both over and under voltage. The relay is energised when the voltage remains between the over and under voltage pre-set thresholds. If the voltage rises above the over voltage set point or falls below the under voltage set point, the relay de-energises. LED indication is provided for both conditions. The relay energises when the voltage recovers to within the 2% hysteresis band. A latch facility is between terminals 8+9.

Latching is disabled for approx. 10 seconds at startup.

VOLTAGE RANGES

230V AC, 400V AC, 110V AC 12V, 24V AC available on request



TVWC range

Voltage Window Comparitor (3 Phase)

- TVWC340 - 400V 3 Phase Voltage Window Comparitor

Technical Table

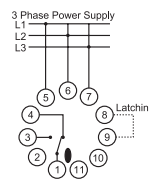
DESCRIPTION OF OPERATION

The unit derives its power from the monitored three phase supply. The relay is energised when the voltage is maintained between the over and under voltage set points. If the voltage rises above the over voltage set point or falls below the under voltage set point, the relay de-energises. LED indication is provided for both conditions. The relay energises when the voltage recovers to within the 2% hysteresis band. A latch facility is between terminals 8 + 9. Latching is disabled for approx. 10 seconds at startup.

Note: For motor control this unit is **not** a Phase Failure Relay.

VOLTAGE RANGES

400V AC 230V AC, 110V AC available on request



TVWC3

* Minimum order quantities may apply

Phase Failure Phase Sequence Relay

TPFPS11 - 110V Phase Failure Sequence

TPFPS23 - 230V Phase Failure Sequence

TPFPS40 - 400V Phase Failure Sequence

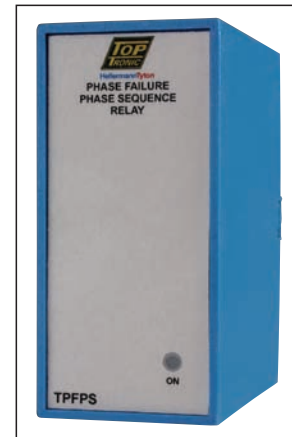
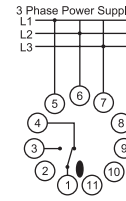
Technical Table

DESCRIPTION OF OPERATION

When power is applied the relay energises after approx. 1 second. The unit will only operate if all 3 phases are present and in the correct sequence. The unit is also sensitive to excessive phase imbalance. The Relay LED will illuminate when phases are in the correct sequence. If not, swap any 2 phases connected to terminals 5, 6 + 7 to obtain the correct phase sequence, which will then be confirmed by the illumination of the LED.

VOLTAGE RANGES

400V AC, 230V AC 110V AC available on request



TPFPS range

Current Monitor

TCM23 - 230V Current Monitor

TCM40* - 400V Current Monitor

Technical Table

PRODUCT

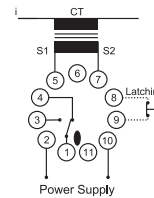
- Switch Selectable Over and Under

DESCRIPTION OF OPERATION

The unit interfaces with 5amp secondary CT's. When power is applied the relay energises immediately, ignoring load conditions for 10 seconds. The relay will de-energise when the load is over or under the pre-set value, depending on the switch selection. The difference between the trip and recovery level "Hysteresis" is adjustable between 5 and 30%. A latch facility is available between terminals 8 + 9.

VOLTAGE RANGES

230V, 400V AC 110V AC available on request



TCM range

Current Window Comparator

TCWC23 - 230VAC Current window comparator

TCWC40 - 400VAC Current window comparator

Technical Table

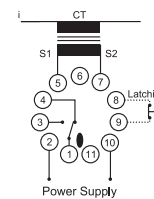
DESCRIPTION OF OPERATION

The unit interfaces with 5amp secondary CT's. When power is applied the relay energises immediately, ignoring load conditions for 10 seconds. After the start-up delay, the relay will remain energised whilst the current is maintained between the pre-set over and under-load limits. If the load rises or falls beyond the set limits, the relay de-energises. A LED indicates if an over- or underload condition has occurred. "Hysteresis" is set at 2%. A latch facility is available between terminals 8+9.

Adjustable response delay 1-10 sec on request.

VOLTAGE RANGES

230V, 400V AC 110V AC available on request



TCWC range

* Minimum order quantities may apply

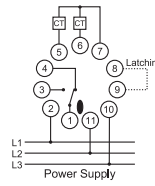
Electronic Overload Relay

TEOLR23* - 230V Electronic Overload Relay

TEOLR40 - 400V Electronic Overload Relay

Technical Table

FUNCTION	
• Electronic Overload Relay with Phase Failure Protection	
DESCRIPTION OF OPERATION	
Interfacing with 2 standard 5 amp current transformer units, the "EOLR" is designed for overload protection of motors. A start-up delay of 10 seconds is only initiated once load is monitored by the current transformers. A 15% above set point switch, together with a trip response timer of 0-10 seconds, makes the unit easy to set-up. After a trip condition, a timer prevents a reset function allowing the motor to cool down. This reset time is switch selectable for either 1 or 8 minutes. The unit has a reset button as well as 2 terminals for remote reset, which must be linked should local resetting on the unit be required. There are 3 LED's indicating "Relay-On", "Trip" and "Reset Timing".	
VOLTAGE RANGES	
230V AC, 400V AC	110V AC available on request



TEOLR range

Frequency Monitor

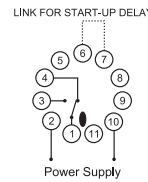
TFM23 - 230VAC 42-50Hz Frequency Monitor

TFM40 - 400VAC 42-50Hz Frequency Monitor

TFM11* - 110VAC 42-50Hz Frequency Monitor

Technical Table

FUNCTION	
• Frequency Monitor 42-58Hz	• Over, Under and Window Switch Selectable
DESCRIPTION OF OPERATION	
When power is applied with terminals 6+7 linked the relay energises immediately, ignoring frequency conditions for ±10 seconds. Without link 6+7, the relay only energises when the frequency is within the preset limits. The unit can be used for over or under conditions, as well as over and under window sensing limits. LED indication is offered for both over or under frequency faults. The relay de-energises if there is a deviation from these set limits. The hysteresis is set to 0.5Hz to prevent relay chatter during small deviations in frequency.	
VOLTAGE RANGES	
230V AC, 400V AC, 110V AC	



TFM range

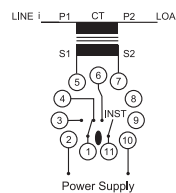
Pump Protection Relay

TPPR23 - 230V Pump Protection Relay (Single Phase)

TPPR40 - 400V Pump Protection Relay (3 Phase)

Technical Table

FUNCTION	
• Phase Failure Protection	• Underload Restart Timer function
DESCRIPTION OF OPERATION	
Interfacing with one current transformer the TPPR-3T8 offers over and under-load protection for borehole pumps. On application of power the relay energises immediately. The unit has a fixed 5 second start-up delay. A 15% above set point switch, together with a trip response timer of 0-10 seconds, makes the unit easy to set-up.	
Conventional 5 amp secondary CT's are used for all loads. CT to be sized accordingly.	
On an Underload condition a restart function is available offering 6 time settings, which are set via DIP switches.	
Time Settings: 20 min 40 min 80 min 2 hrs 4 hrs 8 hrs	
VOLTAGE RANGES	
230V AC, 400V AC	110V AC available on request



TPPR range

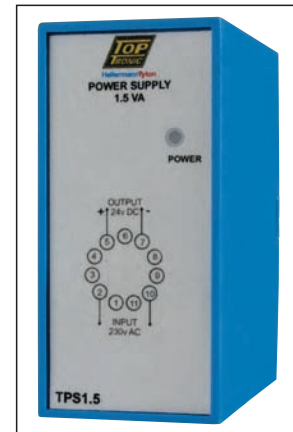
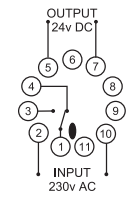
* Minimum order quantities may apply

Power Supply Unit

TPS15* - Reg power supply 230V in 24VDC out

Technical Table

DESCRIPTION OF OPERATION	
Provides a 1.5 VA regulated 24 volt D.C. supply from a 230 volt A.C. power source.	
Used as a 24 volt D.C. power source for sensitive electronic equipment.	
VOLTAGE RANGES	
Input 230V Out 24V DC	110V AC available on request



TPS

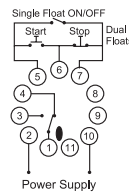
Distance Control Unit

TDCU23 - 230V Distance control unit

TDCU40 - 400V Distance control unit

Technical Table

DESCRIPTION OF OPERATION	
To control water levels in dams and reservoirs over long distances.	
<u>Float Switch - 2 wire control:</u> When the float contact is closed between terminals 5+7, the relay is energised. - Open to de-energise.	
<u>2 Float Switch - 3 wire control:</u> Stop float - normally closed contact connected to terminals 6+7. Start float - normally opens across terminals 5+6. Closing 5+6 energises the relay and remains energised until stop float opens contact between 6+7.	
Voltage on float terminals = 24V DC.	
Distance: up to 4 km using 1.5mm copper wire/cable.	
VOLTAGE RANGES	
230V AC, 400V AC	110V AC available on request



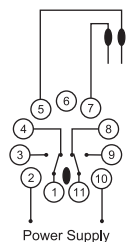
TDCU range

Pump Seal Monitor

TPSM - Pump Seal Monitor

Technical Table

DESCRIPTION OF OPERATION	
Designed for use on submersible pump motors incorporating a built in oil bath. The relay energises on application of power. If water enters the bath through a faulty pump seal, the relay de-energises.	
VOLTAGE RANGES	
230V AC	110V, 400V AC available on request



TPSM range

* Minimum order quantities may apply

Flip Flop Relay

TFFR23 - 230VAC 6 Mains control flip flop relay

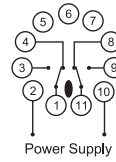
Technical Table

DESCRIPTION OF OPERATION

Used for alternating two pumps for duty and standby operation. Applying power for 30 seconds or longer and then removing the power will cause the relay to alter its state. The relay will remain in this new state until power is re-applied and once again removed when it will then return to its initial position.

VOLTAGE RANGES

230V AC 10V AC/DC, 30V AC/DC, 110V AC, 400V AC available on request



Power Supply



TFFR range

Thermistor Protection Relay

TTPR23 - 230V Thermistor Relay
TTPR40* - 400V Thermistor Relay

Technical Table

DESCRIPTION OF OPERATION

Interfacing with PTC sensors as per DIN 44081 (thermistors) embedded in the motor windings, the TTPR offers excellent motor protection. The LED's indicate trip conditions for motor overheat, cable fault (short or open circuit) as well as the relay's latch condition. Latching is enabled by bridging terminals 8+9.

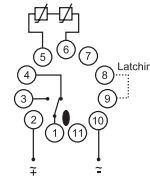
Open circuit voltage $\leq 2.5V$. Short circuit current = 1ma (max). Maximum cold resistance of 1 to 6 sensors connected = 1500 Ω .

Triggering threshold
3100 Ω $\pm 10\%$.

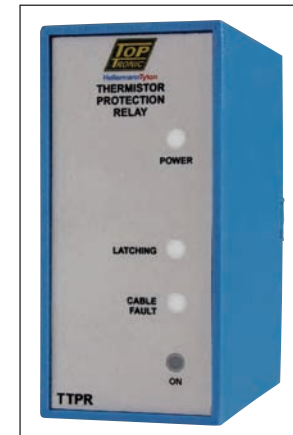
Recovery threshold
1650 Ω $\pm 10\%$.

VOLTAGE RANGES

230V AC, 400V AC 110V AC available on request



Latching



TTPR range

Liquid Level Relay

TLLC11 - 110V Liquid Level Relay
TLLC23 - 230V Liquid Level Relay
TLLC40 - 400V Liquid Level Relay

Technical Table

PRODUCT

- Liquid Level Control "Filling & Emptying"
- Switch Selectable

DESCRIPTION OF OPERATION

Used in conjunction with 3 conductive probes connected to terminals 5 (high), 6 (middle / low) and 7 (bottom/ common).

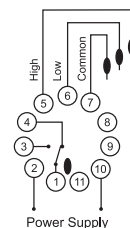
Filling: When the liquid drops below the middle probe, the relay energises. The relay remains energised until the level reaches the high level probe and then de-energises.

Emptying: When the liquid rises above the high probe, the relay energises. The relay de-energises when the liquid falls below the middle probe.

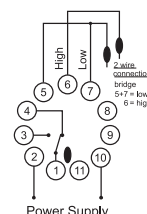
Sensitivity - 50k Ω Use "AEL" Aquaman hanging probes.

VOLTAGE RANGES

230V, 400V AC 110V AC available on request



Power Supply



Power Supply



TLLC range

* Minimum order quantities may apply

11 Pin Base

TES11 - 11 Pin Base

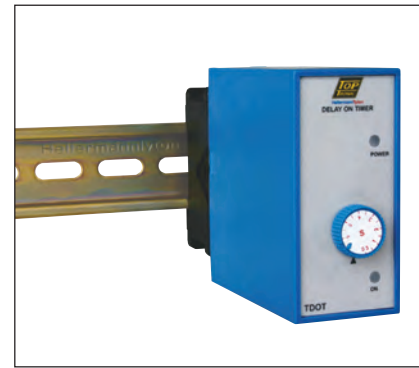
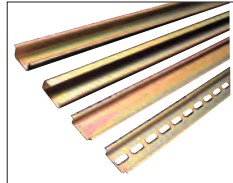
Technical Table

PRODUCT

- Din Rail mounted

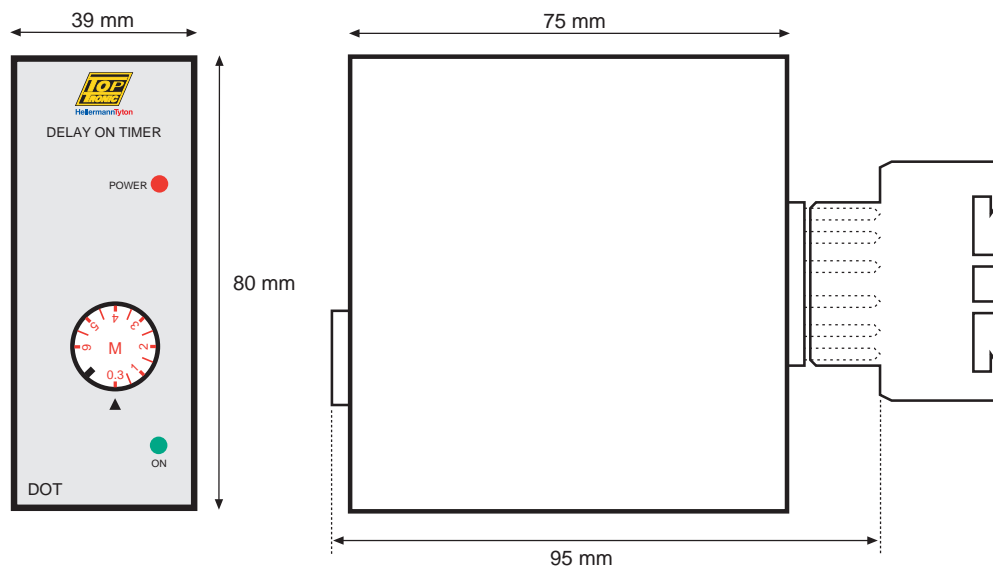
DIN Rail

- Different profiles available
- Different material types available



Technical Specifications

Relays			
Max Amps	S.P.D.T. 10	D.P.D.T. 5	
Max Volts	400	400	
Elect. Life (full amps)	225,000 ops	175,000 ops	
Max Operations	600/Hr	600/Hr	
Housing Dimensions			



Timing Modules			
Output:	S.P.D.T. or D.P.D.T.	Repeat Accuracy:	0.2% max.
AC Consumption:	3.0 VA approx.	Supply Type:	All timers are designed for reactive circuitry except the Interval Reset Units "IRT", which has "Galvanic Protection" via input transformers for 110 - 400V AC.
DC Consumption:	100 mA		
Ambient Temp:	-20°C to 60°C		
Reset Time:	0.5 seconds		
Accuracy:	approx. 0.5%		
Power Modules			
Output:	S.P.D.T. or D.P.D.T.	Supply Type:	Input transformer for 110 - 400V AC units.
AC Consumption:	3 - 6 VA approx.	Hysteresis (recovery):	Generally 5% to 30% adjustable
DC Consumption:	100 mA (12+24V)	Start-Up Delay:	Window Comparator 2% fixed
Ambient Temp:	-20°C to 60°C		Frequency Monitor 0.5 Hz
Response Time:	1 second		Generally 10 seconds except PPR/3 - 5 seconds.
Sensing Modules			
Output:	S.P.D.T. or D.P.D.T.	Supply Type:	Input transformer offering "Galvanic Protection" for 110 - 400V AC units.
AC Consumption:	3 - 6 VA approx.		
DC Consumption:	100 mA (12+24V)		
Ambient Temp:	-20°C to 60°C		
Response Time:	0.5 seconds		
Voltage Range			
Voltage deviation is ±15% for AC and DC supplies.			
Frequency			
All AC modules will operate between 40 to 70 Hz.			