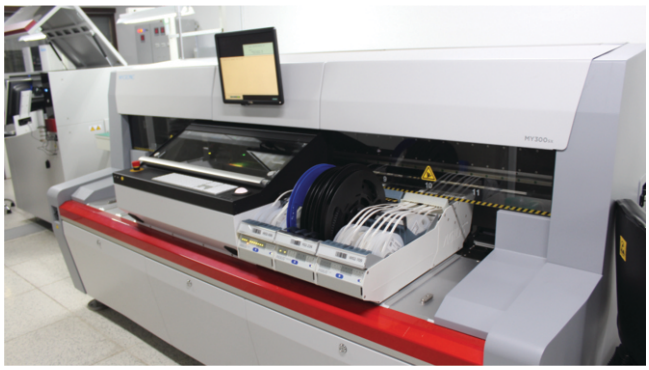
MULTISPAN

Johannesburg Branch
MIMIC COMPONENTS
Cape Town Branch
Mimic Cape

cryo

Controllers For Refrigeration Industry

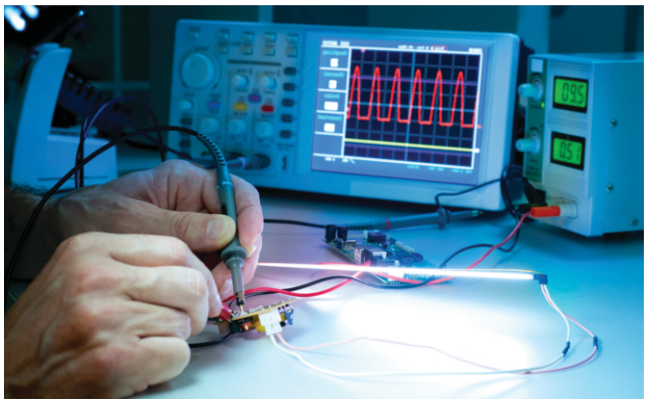
MULTISPAN



Electronic Assembly
Fully Integrated SMT Line

Plastic Enclosure Manufacturing
In-house Injection Moulding

Testing & Quality Control



Reliability Laboratory

CC 510

Cooling Controller
(10A Compressor Output)

Model

MODEL	CC-510
Dimension (HxWxD) mm	37 x 78 x 70
Panel Cutout (HxD) mm	29 x 70

Display Indication

Display 3 digit, 0.56”,
7 Segment RED/WHITE Display
Relay Output Status Indication

Input

Sensor	NTC Sensor
Resolution	0.1°C / 1°C
Accuracy	± 1% FSD (Full Scale Defection)

Output

Relay Output 1C/O (NO-C-NC)

Specification

Control Action	ON-OFF
Hysteresis	0.1 to 20.0°C
Offset Adjustment	-9.0 to +9.0°C
Relay Delay Time	0 to 999 min
Relay Mode	Cool or Heat
Defrost time	1 to 999 min
Defrost Frequency	1 to 999 Hour

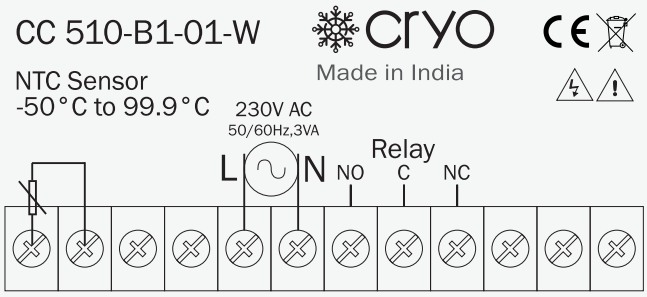
Specification for NTC Sensor

Thermistor Range	-50 to 99.9°C
Nominal Resistance	10K Ohms

Auxiliary Supply

Supply Voltage	230V AC, 50/60 Hz/24V DC/12V DC (Factory set)
Power Consumption	3VA Max @230V AC

Terminal Diagram



CC 520

Cooling Controller (20A Compressor Output)

Model

MODEL	CC-520
Dimension (HxWxD) mm	37 x 78 x 78
Panel Cutout (HxD) mm	29 x 70

Display Indication

Display 3 digit, 0.56”,
7 Segment RED/WHITE Display
Relay Output Status Indication

Input

Sensor	NTC Sensor
Resolution	0.1°C / 1°C
Accuracy	± 1% FSD (Full Scale Defection)

Output

Relay Output 1C/O (NO-C)

Specification

Control Action	ON-OFF
Hysteresis	0.1 to 20.0°C
Offset Adjustment	-9.0 to +9.0°C
Relay Delay Time	0 to 999 min
Relay Mode	Cool or Heat
Defrost time	1 to 999 min
Defrost Frequency	1 to 999 Hour

Specification for NTC Sensor

Thermistor Range	-50 to 99.9°C
Nominal Resistance	10K Ohms

Auxiliary Supply

Supply Voltage	230V AC, 50/60 Hz/24V DC/12V DC (Factory set)
Power Consumption	3VA Max @230V AC

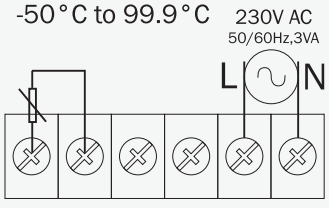
Terminal Diagram

CC 520-B1-01-W

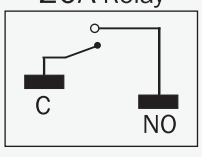
cryo Made in India

NTC Sensor
-50°C to 99.9°C

230V AC
50/60Hz,3VA



20A Relay



CC 512

Cooling Controller
1 Compressor Output (10A)
+ Alarm (10A)

Model

MODEL	CC-512
Dimension (HxWxD) mm	37 x 78 x 70
Panel Cutout (HxD) mm	29 x 70

Display Indication

Display 3 digit, 0.62”,
7 Segment RED/WHITE Display
1st & 2nd Relay Output Status Indication

Input

Sensor	NTC Sensor
Resolution	0.1°C / 1°C
Accuracy	± 1% FSD (Full Scale Defection)

Output

Relay Output 1st Relay For Compressor (NO-C-NC)
& 2nd Relay For Alarm (NO-C-NC)

Specification

Control Action	ON-OFF
Hysteresis	0.1 to 20.0°C
Offset Adjustment	-9.0 to +9.0°C
Compressor Delay Time	0 to 999 min

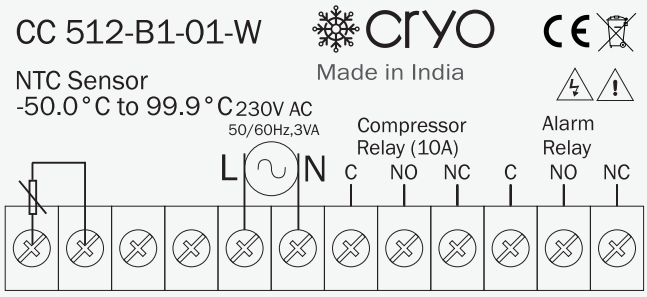
Specification for NTC Sensor

Thermistor Range	-50.0 to 99.9°C
Nominal Resistance	10K Ohms

Auxiliary Supply

Supply Voltage	230V AC, 50/60 Hz/24V DC/12V DC (Factory set)
Power Consumption	3VA Max @230V AC

Terminal Diagram



WITH EXTERNAL
BUZZER

CC 515

Cooling Controller
1 Compressor Output (10A)
+ Buzzer (12V DC)

Model

MODEL	CC-515
Dimension (HxWxD) mm	37 x 78 x 70
Panel Cutout (HxD) mm	29 x 70

Display Indication

Display	3 digit, 0.62”, 7 Segment RED/WHITE Display 1st & 2nd Relay Output Status Indication

Input

Sensor	NTC Sensor
Resolution	0.1°C / 1°C
Accuracy	± 1% FSD (Full Scale Defection)

Output

Output	1st Relay For Compressor (NO-C-NC) & 2nd Output For Buzzer

Specification

Control Action	ON-OFF
Hysteresis	0.1 to 20.0°C
Offset Adjustment	-9.0 to +9.0°C
Compressor Delay Time	0 to 999 min

Specification for NTC Sensor

Thermistor Range	-50.0 to 99.9°C
Nominal Resistance	10K Ohms

Auxiliary Supply

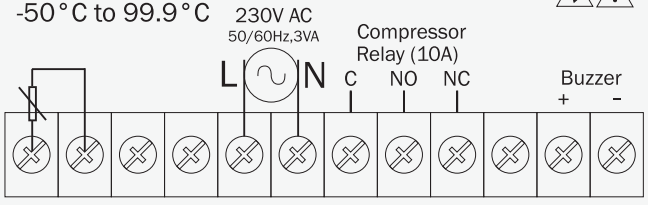
Supply Voltage	230V AC, 50/60 Hz/24V DC/12V DC (Factory set)
Power Consumption	3VA Max @230V AC

Terminal Diagram

CC 515-B1-01-W

cryo Made in India

NTC Sensor
-50°C to 99.9°C



CC 522

Cooling Controller
1 Compressor Output (20A)
+ Alarm (5A)

Model

MODEL	CC-522
Dimension (HxWxD) mm	37 x 78 x 70
Panel Cutout (HxD) mm	29 x 70

Display Indication

Display	3 digit, 0.62”, 7 Segment RED/WHITE Display 1st & 2nd Relay Output Status Indication

Input

Sensor	NTC Sensor
Resolution	0.1°C / 1°C
Accuracy	± 1% FSD (Full Scale Defection)

Output

Relay Output	1st Relay For Compressor (NO-C) & 2nd Relay For Alarm (NO-C-NC)

Specification

Control Action	ON-OFF
Hysteresis	0.1 to 20.0°C
Offset Adjustment	-9.0 to +9.0°C
Compressor Delay Time	0 to 999 min

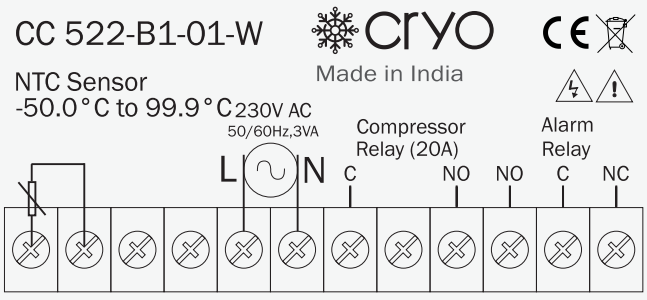
Specification for NTC Sensor

Thermistor Range	-50.0 to 99.9°C
Nominal Resistance	10K Ohms

Auxiliary Supply

Supply Voltage	230V AC, 50/60 Hz/24V DC/12V DC (Factory set)
Power Consumption	3VA Max @230V AC

Terminal Diagram



WITH EXTERNAL
BUZZER

CC 525

Cooling Controller
1 Compressor Output (20A)
+ Buzzer (12V DC)

Model

MODEL	CC-525
Dimension (HxWxD) mm	37 x 78 x 70
Panel Cutout (HxD) mm	29 x 70

Display Indication

Display	3 digit, 0.62”, 7 Segment RED/WHITE Display 1st & 2nd Relay Output Status Indication

Input

Sensor	NTC Sensor
Resolution	0.1°C / 1°C
Accuracy	± 1% FSD (Full Scale Defection)

Output

Output	1st Relay For Compressor (NO-C) & 2nd Output For Buzzer

Specification

Control Action	ON-OFF
Hysteresis	0.1 to 20.0°C
Offset Adjustment	-9.0 to +9.0°C
Compressor Delay Time	0 to 999 min

Specification for NTC Sensor

Thermistor Range	-50.0 to 99.9°C
Nominal Resistance	10K Ohms

Auxiliary Supply

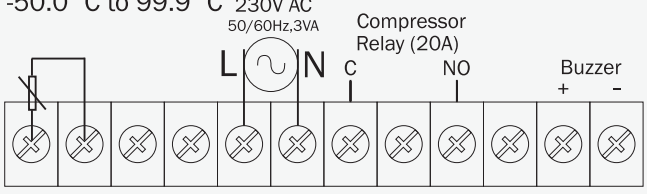
Supply Voltage	230V AC, 50/60 Hz/24V DC/12V DC (Factory set)
Power Consumption	3VA Max @230V AC

Terminal Diagram

CC 525-B1-01-W

cryo Made in India

NTC Sensor
-50.0°C to 99.9°C



CC 521

Cooling Controller
1 Compressor Output (10A)
+ Heater for Defrost (10A)

Model

MODEL	CC-521
Dimension (HxWxD) mm	37 x 78 x 70
Panel Cutout (HxD) mm	29 x 70

Display Indication

Display 3 digit, 0.62",
7 Segment RED/WHITE Display
1st & 2nd Relay Output Status Indication

Input

Sensor	NTC Sensor
Resolution	0.1°C / 1°C
Accuracy	± 1% FSD (Full Scale Defection)

Output

Relay Output 1st Relay For Compressor (NO-C-NC)
& 2nd Relay For Heater (NO-C-NC)

Specification

Control Action	ON-OFF
Hysteresis	0.1 to 20.0°C
Offset Adjustment	-9.0 to +9.0°C
Compressor Delay Time	0 to 999 min
Defrost time	1 to 99 minute/Second
Defrost Frequency	1 to 99 Hour/Minute

Specification for NTC Sensor

Thermistor Range	-50.0 to 99.9°C
Nominal Resistance	10K Ohms

Auxiliary Supply

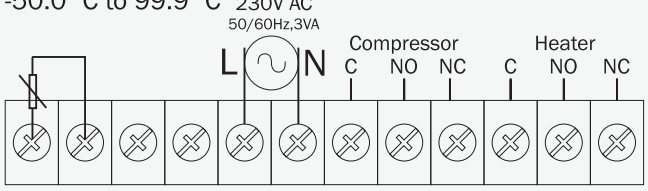
Supply Voltage	230V AC, 50/60 Hz/24V DC/12V DC (Factory set)
Power Consumption	3VA Max @230V AC

Terminal Diagram

CC 521-B1-01-W

cryo Made in India

NTC Sensor
-50.0°C to 99.9°C



CC 552

Cooling Controller
2 Compressor Output (10A+10A)

Model

MODEL	CC-552
Dimension (HxWxD) mm	37 x 78 x 70
Panel Cutout (HxD) mm	29 x 70

Display Indication

Display	3 digit, 0.62”, 7 Segment RED/WHITE Display 1st & 2nd Relay Output Status Indication

Input

Sensor	NTC Sensor
Resolution	0.1°C / 1°C
Accuracy	± 1% FSD (Full Scale Defection)

Output

Relay Output	2 Relay For Compressor (NO-C-NC)

Auxiliary Supply

Supply Voltage	230V AC, 50/60 Hz/ 24V DC/12V DC (Factory set)
Power Consumption	3VA Max@230V AC

Specification

Control Action	ON-OFF
Hysteresis	0.1 to 20.0°C
Offset Adjustment	-9.0 to +9.0°C
Relay Mode	Cool

Time Parameter

• **Relay Delay Time**	0 to 20 min
• **Time duration after which 2nd compressor will be SWITCHED ON so it can contribute to achieving the required setpoint. Here both compressors will be ON**	0 to 30 min
• **Minimum delay time between SWITCH OFF of each compressor , so both compressors never stay off simultaneously**	0 to 15 Sec
• **Setting of Time duration during which compressor overloading is to be avoided**	0 to 12 Hour

Specification for NTC Sensor

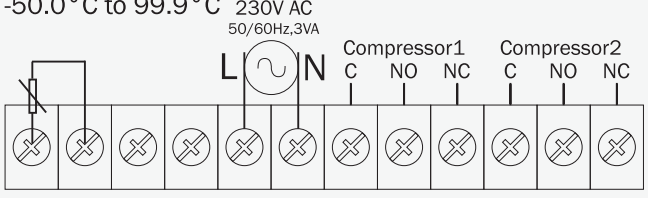
Thermistor Range	-50.0 to 99.9°C
Nominal Resistance	10K Ohms

Terminal Diagram

CC 552-B1-01-W

cryo Made in India

NTC Sensor
-50.0°C to 99.9°C



MHC 512

Humidity Controller (10A+10A)

Model

MODEL	**MHC-512**
Dimension (HxWxD) mm	37 x 78 x 70
Panel Cutout (mm)	29 x 70

Display Indication

Display 3 digit, 0.62",
7 Segment RED/WHITE Display
2 Relay Output Status Indication

Input

Sensor	(RH-85 or RH-100) Humidity Sensor Factory Set
Resolution	0.1% RH
Range	0 to 100% (Subject to Type of Sensor)
Accuracy	± 1% FSD (Full Scale Deflection) (Actual Accuracy will depend on Specified Accuracy of Selected Sensor)

Output

Relay Output 2 Nos
(1st Relay For Humidification or Dehumidification &
2nd Relay For Alarm)

Specification

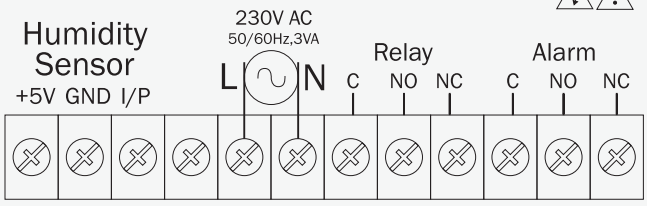
Control Action	ON-OFF
Hysteresis	0.1 to 20.0°C
Offset Adjustment	-9.0 to +9.0°C
Alarm Output	High/Low Alarm

Auxiliary Supply

Supply Voltage	230V AC, 50/60 Hz/24V DC/12V DC (Factory set)
Power Consumption	3VA Max@230V AC

Terminal Diagram

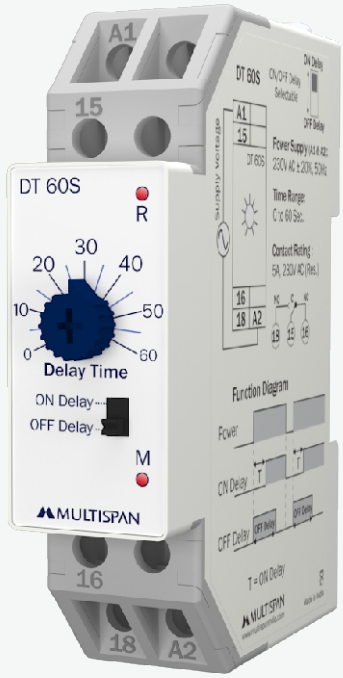
MHC-512-B1-01-W cryo Made in India

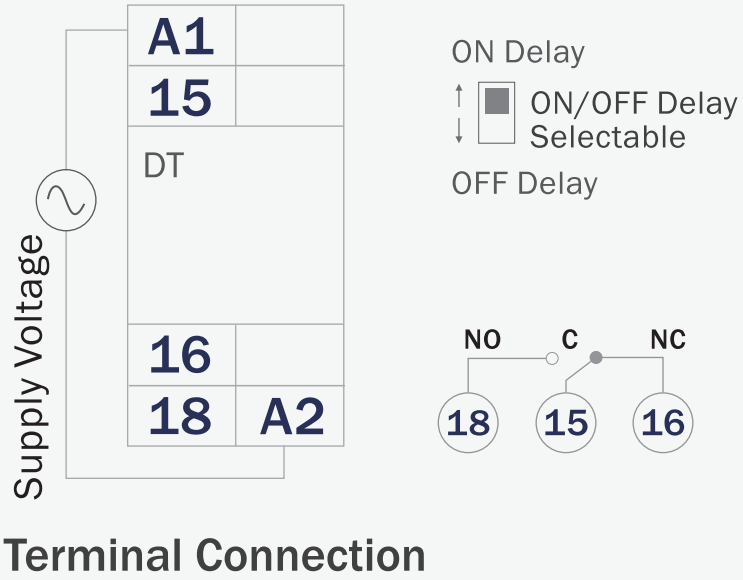


DELAY TIMER

FIXED TIME RANGE

DT-10S/30S/60S/15M/30M



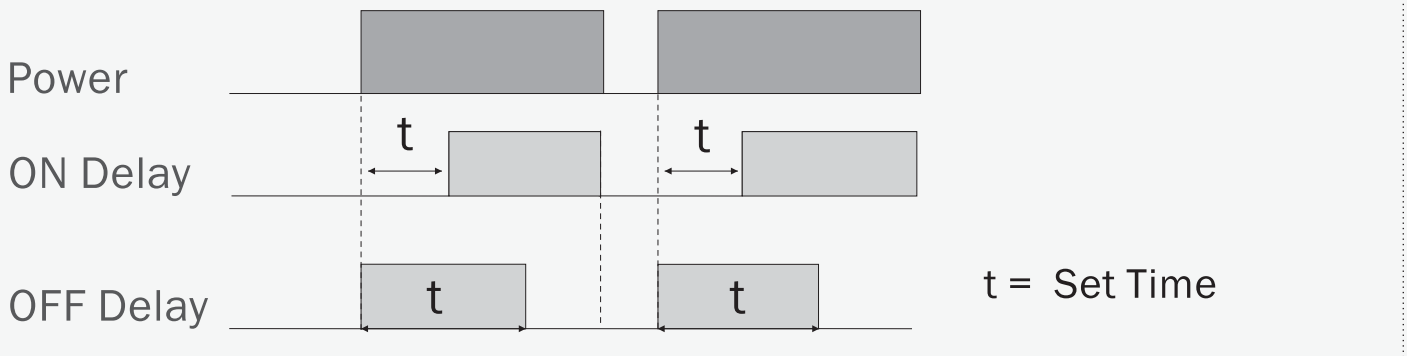


Terminal Connection

Key Specifications

Dimension (HxWxD) mm	90 x 22.5 x 72	
Mounting	Din rail mounting	
TIME RANGE	0 to 10 Sec (DT-10S) 0 to 30 Sec (DT-30S) 0 to 60 Sec (DT-60S)	0 to 15 Min (DT-15M) 0 to 30 Min (DT-30M)
OUTPUT	1 Relay O/P (5A, 230V AC) Res. load	
POWER SUPPLY	230V AC ±20%, 50Hz	

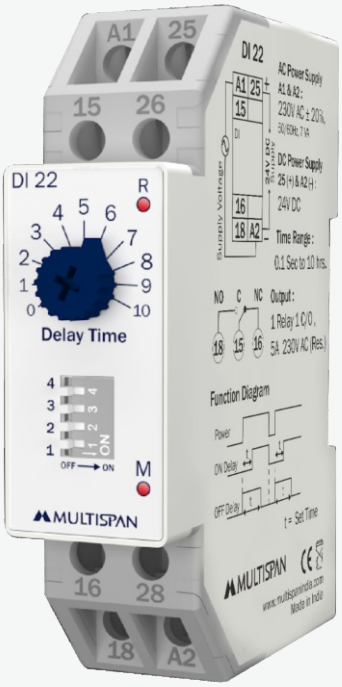
Function Diagram

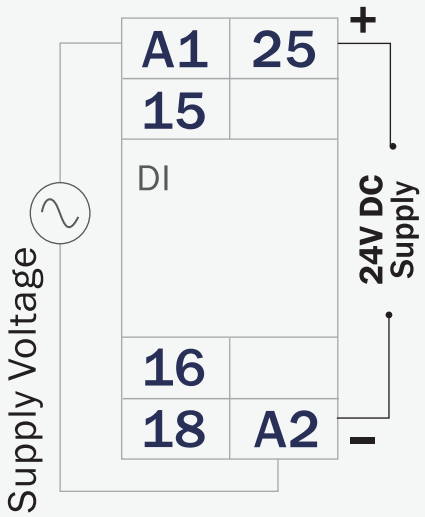


DELAY TIMER

MULTIRANGE

DI-22

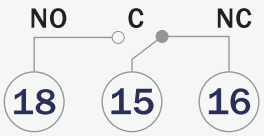




Terminal Connection

AC Power Supply A1 & A2 :
230V AC ± 20%,
50/60Hz, 7 VA

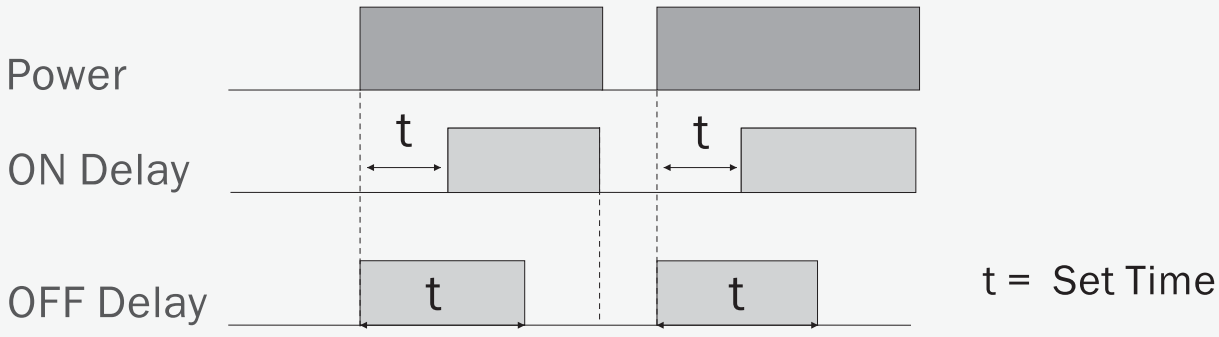
DC Power Supply 25 (+) & A2 (–) :
24V DC



Key Specifications

Dimension (HxWxD) mm	90 x 22.5 x 72
Mounting	Din rail mounting
TIME RANGE	0.1 Sec to 10 Hour
OUTPUT	1 Relay O/P (5A, 230V AC) Res. load
POWER SUPPLY	230V AC ±20%, 50Hz & 24V DC

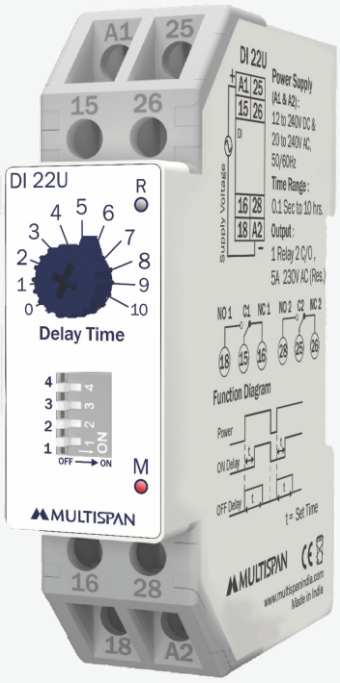
Function Diagram

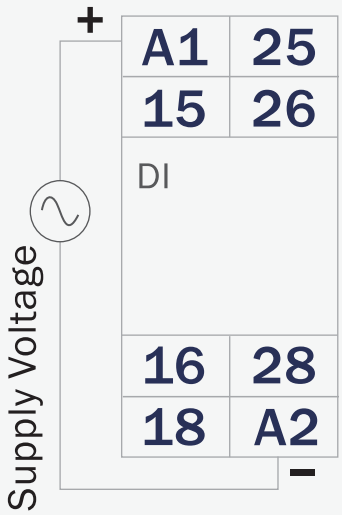


DELAY TIMER

MULTIRANGE UNIVERSAL SUPPLY

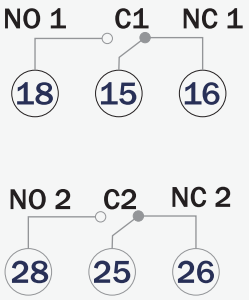
DI-22U





Terminal Connection

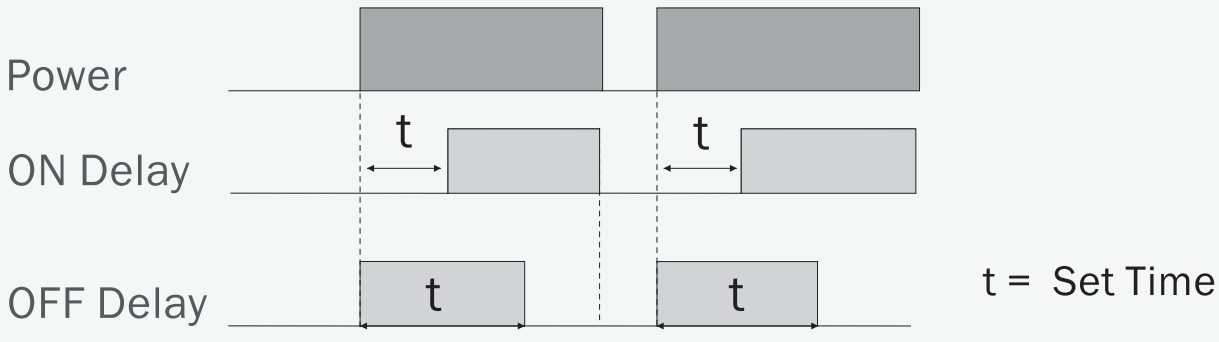
Power Supply (A1 & A2) :
12V DC to 240V DC &
20 to 240V AC ,50/60Hz



Key Specifications

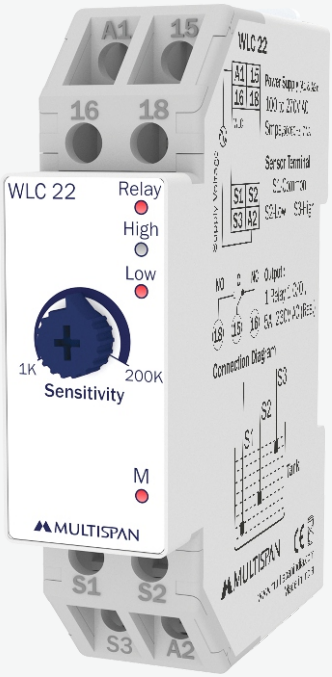
Dimension (HxWxD) mm	90 x 22.5 x 72
Mounting	Din rail mounting
TIME RANGE	0.1 Sec to 10 Hour
OUTPUT	1 Relay O/P (2C/O, 5A 230V AC) Res. load
POWER SUPPLY	12V DC to 240V DC & 20 to 240V AC,50/60Hz

Function Diagram



WATER LEVEL CONTROLLER

WLC-22



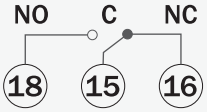
A1	15
16	18
WLC	
S1	S2
S3	A2

Power Supply (A1 & A2):

100 to 270V AC
Smps,50/60Hz, 7 VA

Sensor Terminal

S1-Common, S2-Low, S3-High



Terminal Connection

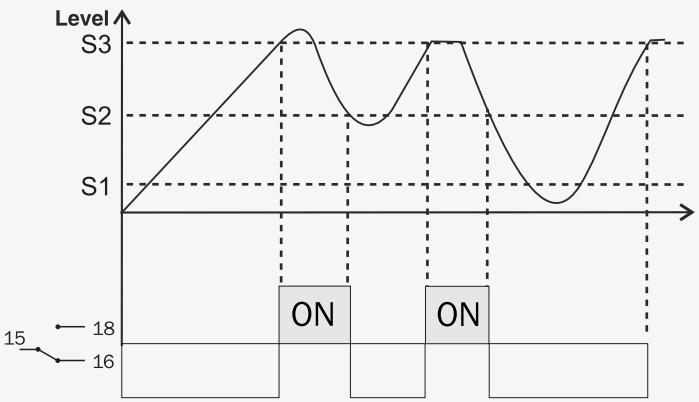
Key Specifications

Dimension (HxWxD) mm	90 x 22.5 x 72
Mounting	Din rail mounting
INPUT	3 Nos. Probs
OUTPUT	1 Relay 1C/O 5A, 230V AC (Resistive Load)
SENSITIVITY	1 to 200K Ohms
POWER SUPPLY	100 to 270V AC, 50/60Hz

TESTING CHART

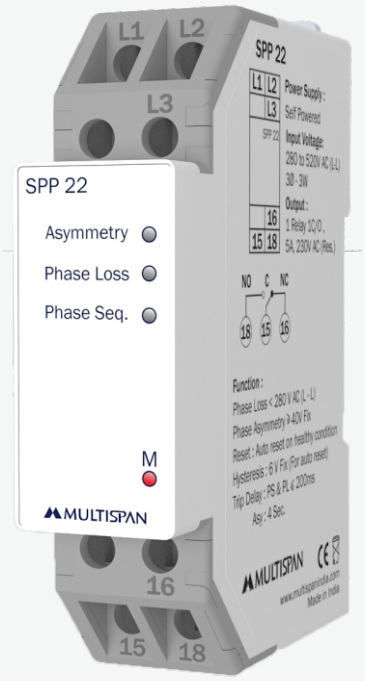
SR NO.	S1	S2	S3	RELAY OUTPUT
1	OUT	OUT	OUT	OFF
2	IN	OUT	OUT	OFF
3	IN	IN	OUT	OFF
4	IN	IN	IN	ON
5	IN	IN	OUT	ON
6	IN	OUT	OUT	OFF

TIMING DIAGRAM



SINGLE PHASE PREVENTOR

SPP-22



L1	L2
	L3
SPP	
	16
15	18

Tripping Parameter

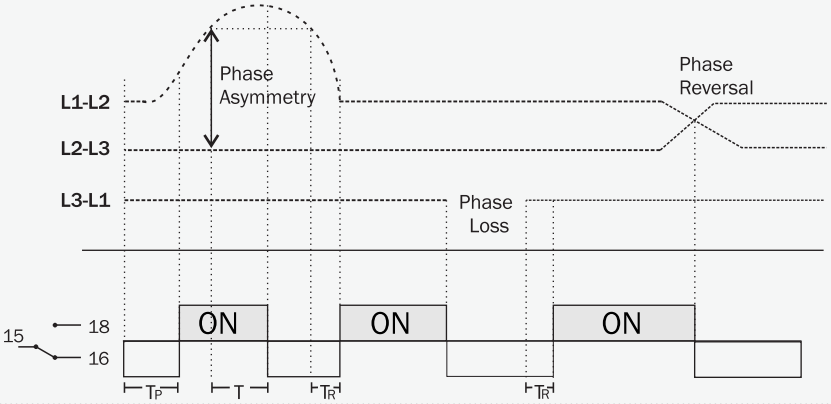
Phase loss
Phase sequence
Phase asymmetry

Terminal Connection

Key Specifications

Dimension (HxWxD) mm	90 x 22.5 x 72
Mounting	Din rail mounting
INPUT	Input Voltage : 280 to 520V AC (L-L), 3Ø-3W
OUTPUT	1 Relay O/P (5A, 230V AC) Res. load
POWER SUPPLY	No Power Supply to be given separately

Function Diagram



T_P = Power ON Delay (<200ms)
T = Trip Delay (<5 Sec)
T_R = Reset Time (<200ms)

Function :
Phase Loss < 280V AC (L - L)
Phase Asymmetry ⩾ 40V Fix
Hysteresis : 6V Fix

VOLTAGE PROTECTION DEVICE

V22-RYB

L1	L2
	L3
V22-RYB	
	16
15	18

Tripping Parameter

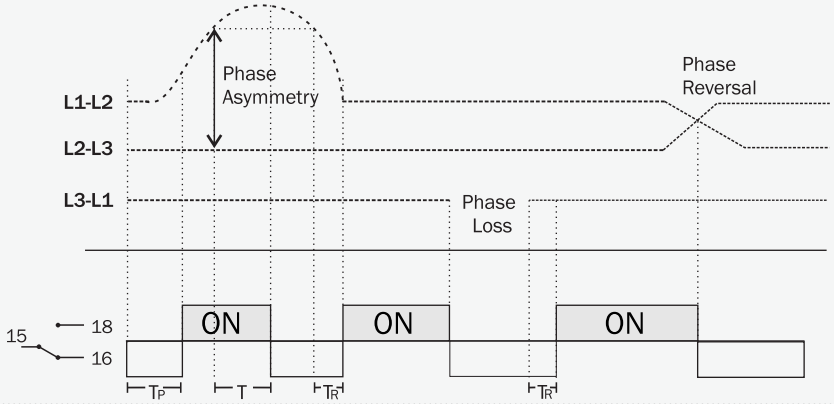
Phase loss
Phase sequence
Phase asymmetry

Terminal Connection

Key Specifications

Dimension (HxWxD) mm	90 x 22.5 x 67.5
Mounting	Din rail mounting
INPUT	Input Voltage : 280 to 520V AC (L-L), 3Ø-3W
OUTPUT	1 Relay O/P (5A, 230V AC) Res. load
POWER SUPPLY	No Power Supply to be given separately

Function Diagram



T_P = Power ON Delay (<200ms)
T = Trip Delay (<5 Sec)
T_R = Reset Time (<200ms)

Function :
Phase Loss < 280V AC (L - L)
Phase Asymmetry ⩾ 40V Fix
Hysteresis : 6V Fix

VOLTAGE PROTECTION RELAY

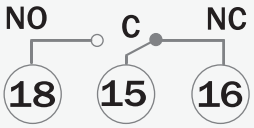
SELECTABLE TIME PARAMETER

VPR-22U

L1	L2
	L3
VPR	
	16
15	18

Tripping Parameter

Under Voltage
Over Voltage
Phase asymmetry
Phase sequence
Phase loss

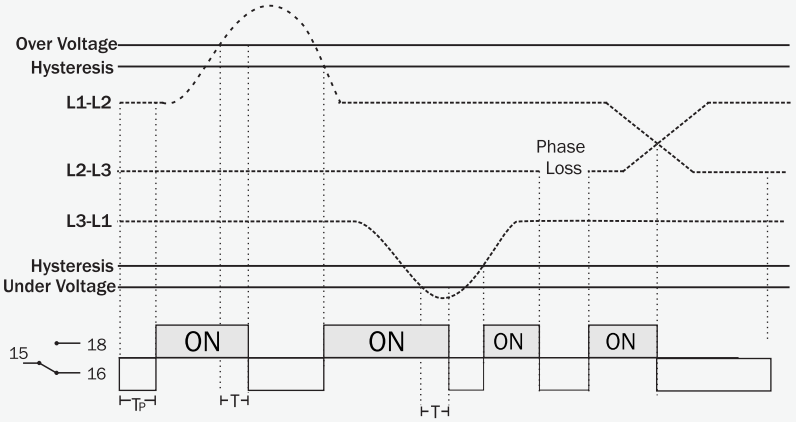


Terminal Connection

Key Specifications

Dimension (HxWxD) mm	90 x 22.5 x 67.5
Mounting	Din rail mounting
INPUT	Input Voltage : 280 to 520V AC (L-L), 3Ø-3W Rated Voltage : 415V AC (L-L)
OUTPUT	1 Relay O/P (5A, 230V AC) Res. load
POWER SUPPLY	No Power Supply to be given separately

Function Diagram



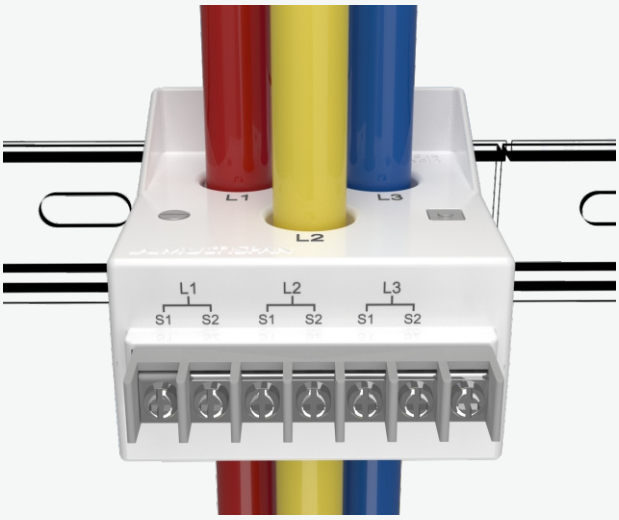
Phase Loss : < 280V AC (L-L)
Phase Asymmetry : 40V AC (L-L)
Hysteresis : 6 V

T_P = Power ON Delay
T = Trip Delay

MOTOR PROTECTION RELAYS

125Amp

now with 3CT



MPD-192-A2-100

Motor Protection Relay

INPUT	CT	3Ø-3W & 3Ø-4W
Current & Voltage	Upto 60Amp	Selectable

Protection Parameters:

- Over Current
- Under Current
- Over Voltage
- Under Voltage
- Over Frequency
- Under Frequency
- Unbalance
- Short Circuit
- Single Phase Prevention
- Lock Rotor Point
- Phase Sequence
- Neutral Loss

Data Loggers

Temperature & Process

16 Input

8 Output

RS 485 MODBUS

USB
Pendrive Compatible

Data Logging Facility
with Easy to download data in
Excel File

PC Interfacing Software
also available for both 8 & 16 Channel

VOLTAGE MONITORING RELAY

VMR-132 & VMR-232

Voltage Monitoring Relay

INPUT Voltage	**3Ø-3W / 3Ø-4W / 1Ø-2W** Selectable

Protection Parameters:

- Over Voltage
- Under Voltage
- Asymmetry
- Over Frequency
- Under Frequency
- Phase Loss
- Phase Sequence

Humidity & Temperature Controller

MHT-1202 & MHT-9044

Humidity & Temperature Controller

Input

Humidity & PT-100/3W

Output

1 Relay for Humidity

1 Relay for Temperature

RS 485 MODBUS

User-friendly & accurate solutions

Multispan is a leading company involved in the development and production of PID Temperature Controllers , Power & Energy Meters, Protection Relays, Timers & Counters as well as customised solutions for various industrial applications. As an owner-managed family business, we employ about 300+ staff with 75+ domestic channel sales partner network in India plus product distribution in 25+ countries.

With marked customer orientation, consistently high quality and vast innovation capability, Multispan develops specific solutions for many industries and applications

Our focus

Provide user-friendly accurate solutions in a way it makes a difference for every industry

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Australia
Mexico

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Egypt
Kenya
Nigeria
Tunisia
Uganda

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Bahrain
Bangladesh
India
Indonesia
Iraq
Kuwait
Malaysia
Maldives
Myanmar
Nepal
Oman
Qatar
Saudi Arabia
Singapore
UAE
Vietnam

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