Smart Relay *Genie*™- *Nx*

- Supports upto 48 I/Os
  (32 Digital Inputs & 16 Digital Outputs)
- 250 lines of ladder programming
- 16 soft text messages, Time Switches,
  Compare Counters, Timers, Counters &
  12 Analog functions
- DST Feature Available

- Backlit LCD Screen for display & modification of
  pre-selected parameters of functional blocks,
  viewing I/O status and programming on the device
- PC software for programming, online & offline
  simulation, documentation & printing
- Designed for use in automation for commercial &
  Industrial sectors

Cat. No.		G7DDT9	G8DDT9
Parameters			
Supply Voltage (⏚)		110 - 240 VAC	12 - 24 VDC
Supply Variation		-20% to +10% (of ⏚)	
Frequency		50/60 Hz	
Power Consumption		5W	
Digital Input		8	6
Analog Input		N A	2 (Can be used as Digital Inputs)
Digital Input Range		(0 - 40 VAC) OFF, (80 - 265 VAC) ON	(0 - 4 VDC) OFF, (8 - 26.4 VDC) ON
Analog Input Range		N A	0 to 10 VDC
Digital Output	Relay Output	4 'NO'	
	Contact Rating	8A @ 240 VAC / 5A @ 30 VDC (Resistive)	
	Electrical Life	10^5	
	Mechanical Life	10^7	
Utilization Category	AC - 15	Rated Voltage (Ue): 120/240 V, Rated Current (Ie): 3.0/1.5 A	
	DC - 13	Rated Voltage (Ue): 24/125/250 V, Rated Current (Ie): 2.0/0.22/0.1 A	
I/O Extensions (Max.)		3	
Power Reserve (For Clock Only)		150h at -10°C to +55°C	
Modbus Communication		Yes (RTU) (Slave)	
DST		Settable	
Lines for Ladder Programming		250	
Function Blocks	Timers	16 (ON Delay, Interval, Cyclic ON-OFF, OFF Delay)	
	Counters	16 (Up / Down, Retentive selectable)	
	Time Switches	16 (Weekly / Daily)	
	Compare Counters	16	
	Analog Functions	N A	12
	Soft Text Messages	16 (Priority Driven)	
	Auxiliary Relays	64	
Operating Temperature		-10° C To + 55° C	
Storage Temperature		-25° C To + 70° C	
Humidity (Non Condensing)		95% (Rh)	
Enclosure		Flame Retardant UL 94-V0	
Dimension (W x H x D) (in mm)		72 X 90 X 65	
Weight (unpacked)		230 g	
Mounting		Base / DIN Rail	
Degree of Protection		IP 20 for Terminals, IP 40 for Enclosure	
Certification		CE c(UL)us LISTED RoHS Compliant	

EMI / EMC		
Harmonic Current Emissions	IEC 61000-3-2	Ed. 3.0 (2005-11) Class A
ESD	IEC 61000-4-2	Ed. 1.2 (2001-04) Level II
Radiated Susceptibilty	IEC 61000-4-3	Ed. 3.0 (2006-02) Level III
Electrical Fast Transients	IEC 61000-4-4	Ed. 2.0 (2004-07) Level IV
Surges	IEC 61000-4-5	Ed. 2.0 (2005-11) Level IV
Conducted Susceptibilty	IEC 61000-4-6	Ed. 2.2 (2006-05) Level III
Voltage Dips & Interruptions (AC)	IEC 61000-4-11	Ed. 2.0 (2004-03) Level All 7 Levels
Voltage Dips & Interruptions (DC)	IEC 61000-4-29	Ed. 1.0 (2000-08) Level All 5 Levels
Conducted Emission	CISPR 14-1	Ed. 5.0 (2005-11) Class A
Radiated Emission	CISPR 14-1	Ed. 5.0 (2005-11) Class A

Environmental		
Cold Heat	IEC 60068-2-1	Ed. 6.0 (2007-03)
Dry Heat	IEC 60068-2-2	Ed. 5.0 (2007-07)
Vibration	IEC 60068-2-6	Ed. 7.0 (2007-12) 5g
Repetitive Shock	IEC 60068-2-27	Ed. 4.0 (2008-02) 40g, 6ms
Non-Repetitive Shock	IEC 60068-2-27	Ed. 4.0 (2008-02) 30g, 15ms

ORDERING INFORMATION

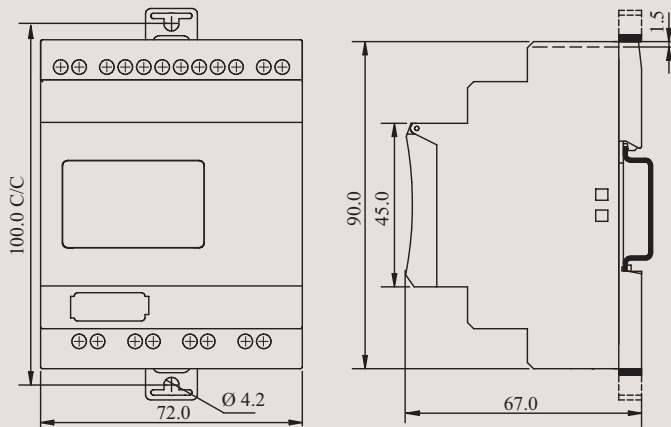| Cat. No.	Description
G7DDT9	110 - 240 VAC, Genie Nx Base Module
G7DDT9B	110 - 240 VAC, Genie Nx Base Module, Without LCD Display
G8DDT9	12 - 24 VDC, Genie Nx Base Module
G8DDT9B	12 - 24 VDC, Genie Nx Base Module, Without LCD Display
G7DDT6E	110 - 240 VAC, Genie Nx Extension Module
G8DDT6E	12 - 24 VDC, Genie Nx Extension Module
GFDNN3M	Memory Card
GFDNN2S	RS 232 Serial Communication Cable
GFDNN1	USB Cable
GNXNN1	Genie Nx Software supplied on CD-ROM compatible with Windows 98, 2000, XP, VISTA & Windows 7.

Smart Relay *Genie™ - NX*

• Nx-Comm RS 485 Module

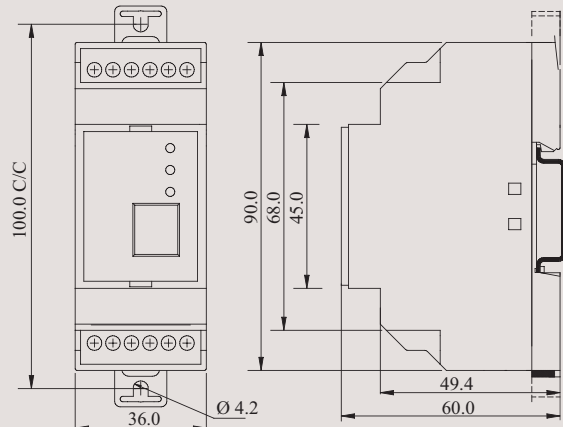| Cat. No.	G7XDTR4	G8XDTR4
Parameters		
Supply Voltage (⎓)	110 - 240 VAC	12 - 24 VDC
Input	TTL Level	
Output	RS 485 Protocol (Two wires, D +, D -)	
Number of Nodes	32 Standard unit loads	
Isolation voltage	2000 Vrms	
Baud Rate	300, 600, 1200, 2400, 4800, 9600	
Operating Temperature	-10°C to + 55°C	
Storage Temperature	-20°C to + 70°C	
Modbus Communication	Yes (RTU) (Slave)	
LED Indications	Red LED's for Tx & Rx. Green LED for Power indication.	
Certification	CE c(UL)us LISTED RoHS Compliant	
Weight (unpacked)	80 g	84 g

ORDERING INFORMATION

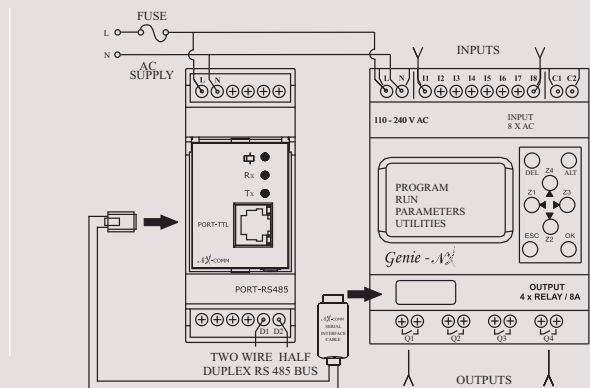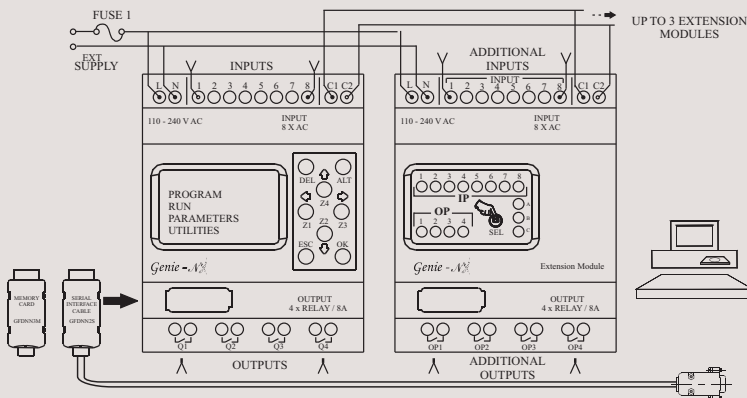| Cat. No.	Description
G7XDTR4	110 - 240 VAC, RS 485 Communication Module
G8XDTR4	12 - 24 VDC, RS 485 Communication Module

MOUNTING DIMENSION (mm)
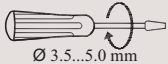

G7DDT9, G8DDT9, G7DDT6E, G8DDT6E

G7XDTR4, G8XDTR4

CONNECTION DIAGRAM

TERMINAL TORQUE & CAPACITY

Ø 3.5...5.0 mm	Torque - 1.1 N.m (10 Lb.in) Terminal screw - M3.5
	Solid Wire - 2 X 0.2...2.5 mm^2
AWG	1 X 24 to 10

FEATURES

Programming:

Programming can be carried out independently using the keys on the Genie-NX base module with the help of ladder diagram or on a PC, using "G-Soft NX." software.

LCD Backlighting:

Backlight of the LCD display is present for a minimum 15 seconds whenever the device is powered ON or a key is pressed on the base module. The backlight can also be configured to be permanently ON or permanently OFF by configuring the "Device Utilities" option in the device menu or by using the G-Soft NX application software.

Memory Card:

Genie-NX has a Program Transfer feature, which allows programs to be transferred or copied into another Genie-NX with the help of memory card. This feature enables quick copy of the programs without the use of a laptop or a PC.

I/O Extensions:

User can connect a maximum of 3 Extension Modules to the Genie-NX base module & each Extension Module has 8 inputs and 4 outputs, so we can expand up to 48 I/O extensions if necessary via the Genie-NX. Expansions are made in daisy chain fashion.

Communication Module:

A module for communication on the Modbus network is available, which is called "NX-Comm "to facilitate communication of the logic relay over a 2 wire half duplex RS 485 link. Modules are powered by 110- 240 VAC or 12- 24 VDC power supplies. The base module can be connected to this communication interface by means of the cable and the communication takes place via the NX-Comm. on the RS 485 link.

APPLICATIONS

For Industry:
• Printing and Packaging machines
• Ancillary equipments in textile, plastic.
• Material handling equipments, conveyor systems.
• Interlocking units in distributed control systems.

For Commercial / Building Sector:
• Automation of barriers
• Automation of compressors and pumps for air conditioning requirements
• Automation of lights