


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 (ϕ) | 110 - 240 VAC | 12 - 24 VDC | |
| Supply Variation | -20% to +10% (of ϕ) | | |
| 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 | | |
| | Relay Output | 4 'NO' | |
| Digital Output | 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 |    | | |
| 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 Susceptibility | 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 Susceptibility | IEC 61000-4-6 | Ed. 2.2 (2006-05) Level III | |
| Voltage Dips & Interruptions (AC) | IEC 61000-4-11 | Ed. 2.0 (2004-03) All 7 Levels | |
| Voltage Dips & Interruptions (DC) | IEC 61000-4-29 | Ed. 1.0 (2000-08) 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. |

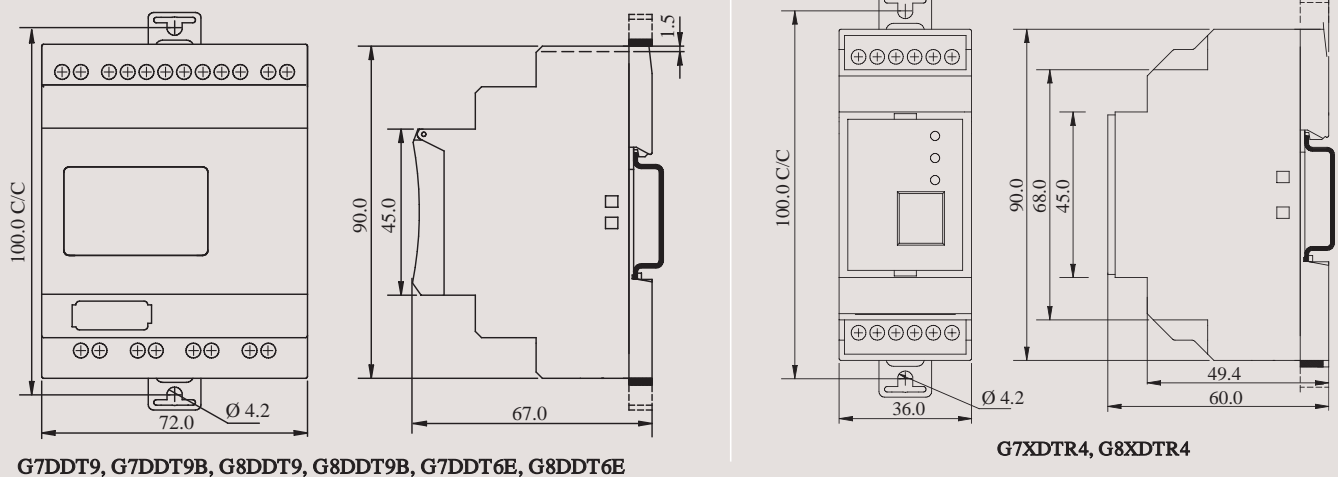


| Cat. No. | G7XDTR4 | G8XDTR4 |
|-----------------------|---|-------------|
| Parameters | | |
| Supply Voltage (☉) | 110 - 240 VAC | 12 - 24 VDC |
| Input | TTL Level | |
| Output | RS 485 Protocol (Two wires, D +, D -) | |
| Number of Nodes | 32 Standard unit loads | |
| Isolation voltage | 2000 Vrms | |
| 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 |   | |
| Weight (unpacked) | 80 g | 84 g |

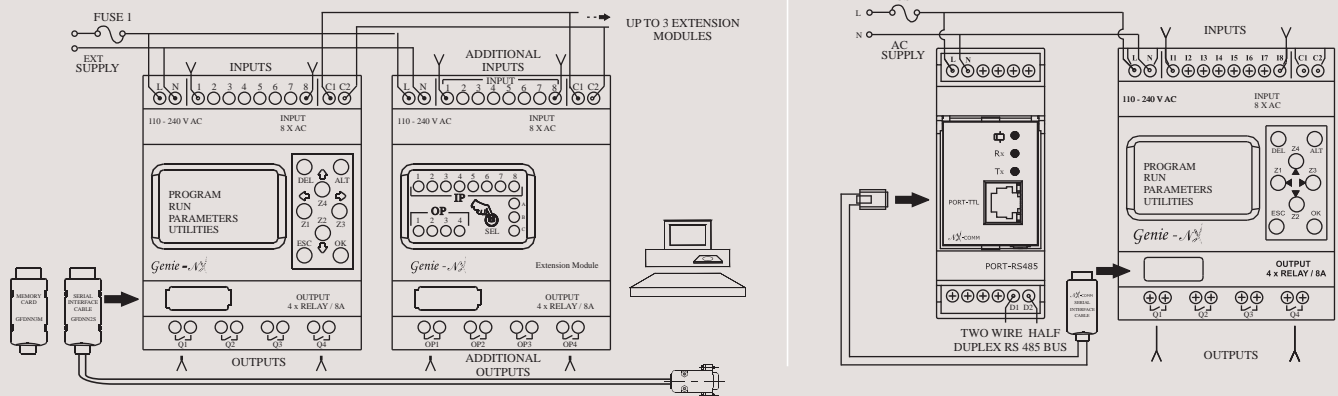
ORDERING INFORMATION

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

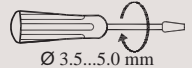

MOUNTING DIMENSION (mm)



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 |

Note: UL approval not applicable to G7DDT9B & G8DDT9B



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