



Product Overview

The AX-PLC-GDD Programmable Logic Controller supports up to 48 I/O's and has 250 lines of ladder programming. The unit has a backlit LCD screen for display & modification of pre-selected parameters of functional blocks, viewing I/O status and programming on the device. The unit has PC software for programming, online and offline simulation, documentation and printing

Features

- Upto 32 Digital Inputs with expansion modules
- Upto 16 Digital Outputs with expansion modules
- 16 soft text messages
- Modbus RTU communication (option)
- 12/24Vdc and 110/240 Vac versions
- 16 Timers & Counters
- 16 Time switches
- LCD Display

Order Codes

AX-PLC-G7DDT9	-Programmable Logic Master Controller AC (8 x DI, 4 x DO)
AX-PLC-G8DDT9	-Programmable Logic Master Controller DC (6 x DI, 2 x AI, 4 x DO)
AX-PLC-G7DDT6E	-Programmable Logic Extension Module AC (8 x DI, 4 x DO)
AX-PLC-G8DDT6E	-Programmable Logic Extension Module DC (6 x DI 2 x AI, 4 x DO)
AX-PLC-GFDNN3M	-Memory Card
AX-PLC-GFDNN1	-USB Cable
AX-PLC-GFDNN2S	-RS232 Serial Communication Cable
AX-PLC-GNXNN1	-Software supplied on CD-ROM compatible with Windows 98/2000/XP/Vista
AX-PLC-G7XDTR4	-RS485 Module AC
AX-PLC-G8XDTR4	-RS485 Module DC

Applications

HVAC

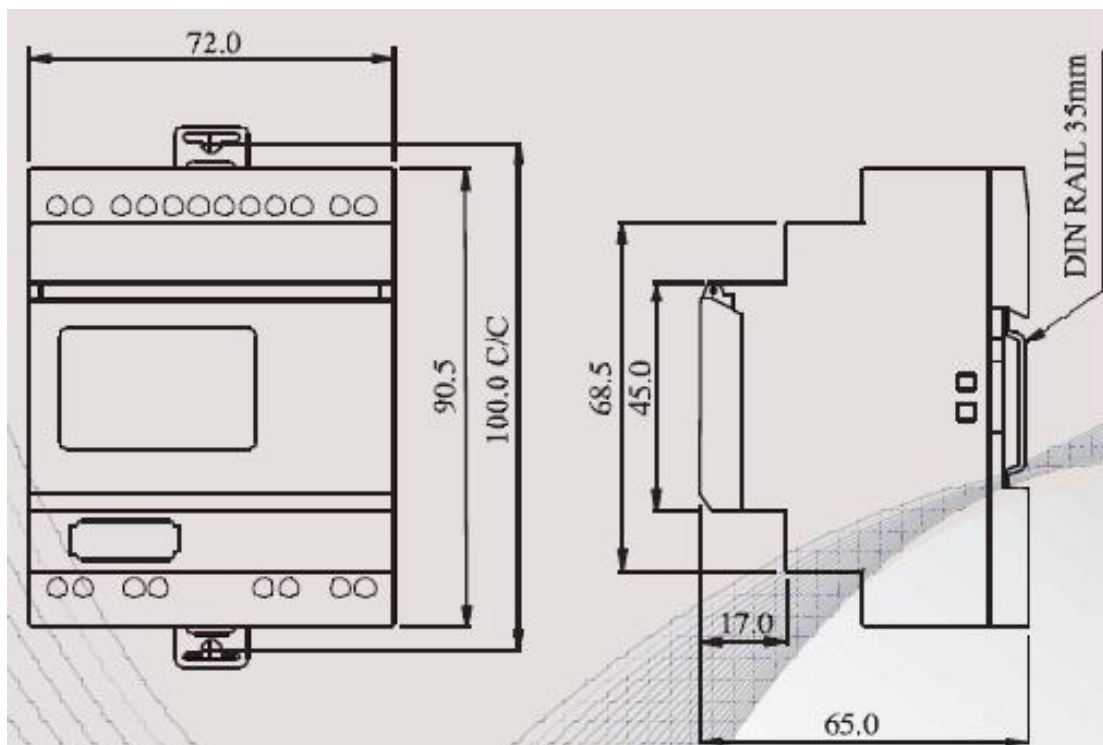
Energy Management
Heating and Cooling Control
Ventilation and Air Conditioning systems
Motor, pump, valve and compressor control
Automation of Barriers

Automation of Lights

Industrial

Printing and Packaging machines
Ancillary Equipment
Material handling equipment
Conveyors
Interlocked Units in distributed Control systems
Water purification and treatment

Dimensions



Programming

Programming can be carried out independently using the keys on the master controllers with the help of ladder diagram on a PC using the “Geniesoft” software supplied with each master controller
When using a PC programming can be carried out in either in ladder language or the “Geniesoft”.

Backlighting

Backlighting of the display will be there for a minimum of 15 seconds & by direct action of the keys on the Master controller or by using the “Device Utilities” option in the “Geniesoft” application software

Memory

The units has a back up memory, which allows programmes to be transferred or copied onto another master controller with the help of the memory card. This feature enables quick copying of the programs without the use of a laptop or PC.

I / O Extensions

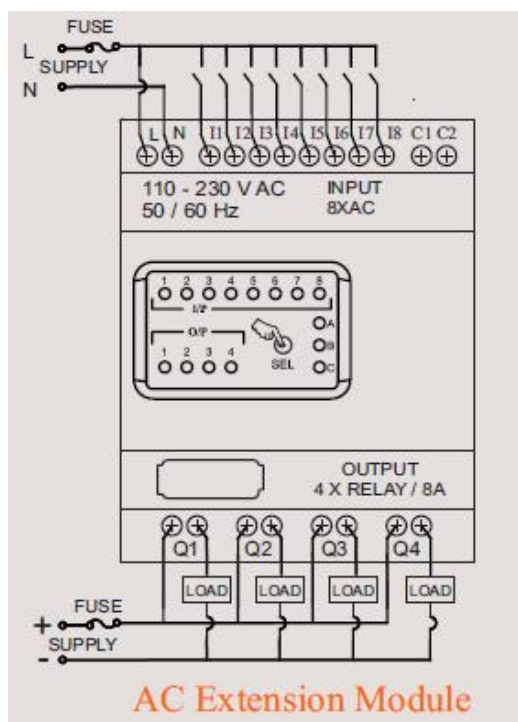
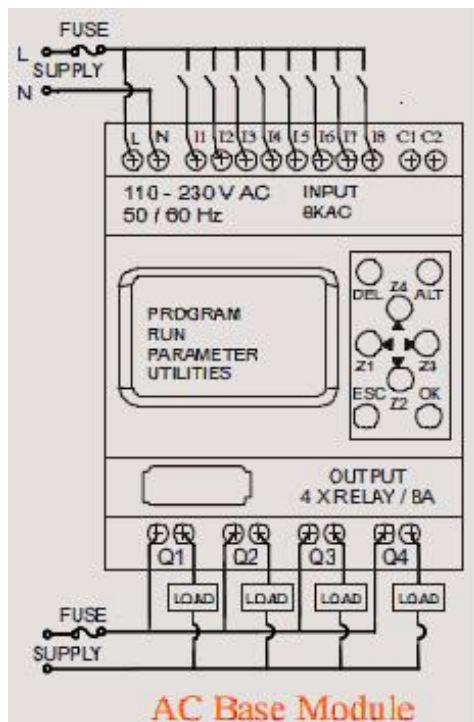
Users can connect a maximum of 3 extension modules to each master controller & each extension module has 8 inputs and 4 outputs, so we can expand upto 48 I/O's if necessary. The expansions are made in a daisy chain fashion.

Communication Module

A module for communication on a Modbus network is available, to facilitate communication of the logic relay over a 2 wire half duplex RS 485 link. These modules have to be powered as per the master controller and extension modules. The master controller can be connected to this communication interface by means of the cable supplied and the communication takes place via the communications module (see page 6)

AX-PLC-G7DDT9-Master Controller-**AC** & **AX-PLC-G7DDT6E - Extension Module**
Product Specification

Power Supply:	110 to 240Vac - 20% +10%
Max Supply Current:	36mA
Power Consumption:	5W
Digital Input Range:	0-40Vac -Off 70 to 265Vac on
Digital Inputs:	8
Modbus Communication:	yes -RTU Slave
Switching Contacts	SPST Relays 8A @240Vac resistive
Relay Outputs:	4
Timers:	16
Counters:	16 (up/down and & retentive selectable)
Time Switches	16
Compare Counters:	16
Soft Messages:	16 priority driven
Auxiliary Relays:	32
I/O Extensions:	Yes maximum of 3
Power Reserve (for clock only):	150hrs (lithium battery) @ 0 to 55C
LCD Display:	2 Line 16 digit LCD
Lines for Ladder Programme:	250
Protection:	IP20 (for front panel only - conforms to IEC 60529)
External Fusing:	250mA fuse
Dimensions:	72x 65 x 90mm
Weight:	248 gms
Terminals:	Terminals for 0.5 to 2.5mm ² cable
Ambient Range:	0 to 55°C 35 to 85% RH non condensing
Approvals:	CE, UL
EMC:	CISPR 14-1 Class B, IEC 61000-4-2 level 111, IEC 61000-4-4 level 1V IEC 61000-4-5 level 111, IEC 61000-4-11, IEC 68-2-6



Every effort has been taken in the production of this data sheet to ensure it's accuracy. Axio can not, however, accept responsibility for any damage, expense, injury, loss or consequential loss resulting from any errors or omissions. Axio has a policy of continuous improvement and reserves the right to change this specification without notice.

AX-PLC-GDD

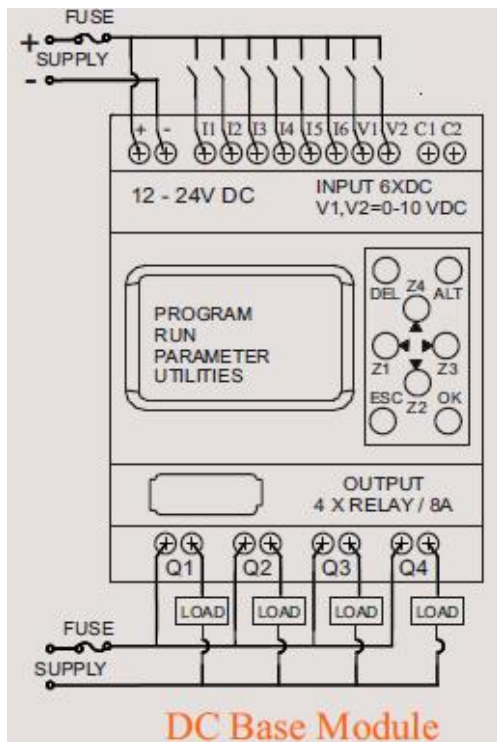
Programmable Logic Controller



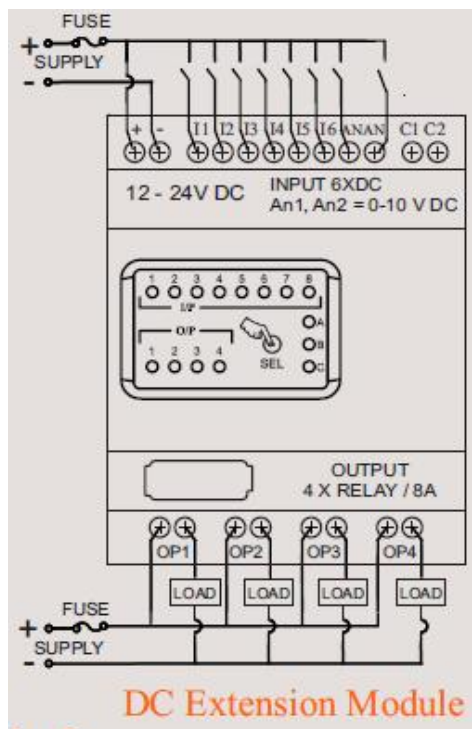
AX-PLC-G8DDT9 -Master Controller **DC & AX-PLC-G8DDT6E Extension Module**

Product Specification

Power Supply:	12 to 24Vdc -20% to + 10% of normal voltage
Max Supply Current:	360mA
Power Consumption:	5W
Digital Input Range:	0-4Vdc -Off 7 to 26.4Vdc on
Digital Inputs:	6
Analogue Input Range:	0-10Vdc
Analogue Inputs:	2 (can be used digitally)
Analogue Functions:	12
Modbus Communication:	yes -RTU Slave
Switching Contacts	SPST Relays 8A @240Vac resistive
Relay Outputs:	4
Timers:	16
Counters:	16 (up/down and & retentive selectable)
Time Switches	16
Compare Counters:	16
Soft Messages:	16 priority driven
Auxiliary Relays:	32
I/O Extensions:	Yes maximum of 3
Power Reserve (for clock only):	150hrs (lithium battery) @ 0 to 55C
LCD Display:	2 Line 16 digit LCD
Lines for Ladder Programme:	250
Protection:	IP20 (for front panel only -conforms to IEC 60529)
External Fusing:	500mA fuse
Dimensions:	72x 65 x 90mm
Weight:	232 gms
Terminals:	Terminals for 0.5 to 2.5mm ² cable
Ambient Range:	0 to 55°C 35 to 85% RH non condensing
Approvals:	CE, UL
EMC:	CISPR 14-1 Class B, IEC 61000-4-2 level 111, IEC 61000-4-4 level 1V IEC 61000-4-5 level 111, IEC 61000-4-11, IEC 68-2-6



DC Base Module



DC Extension Module



AX-PLC-G7DDT6E - Extension Module AC

AX-PLC-G8DDT6E - Extension Module DC

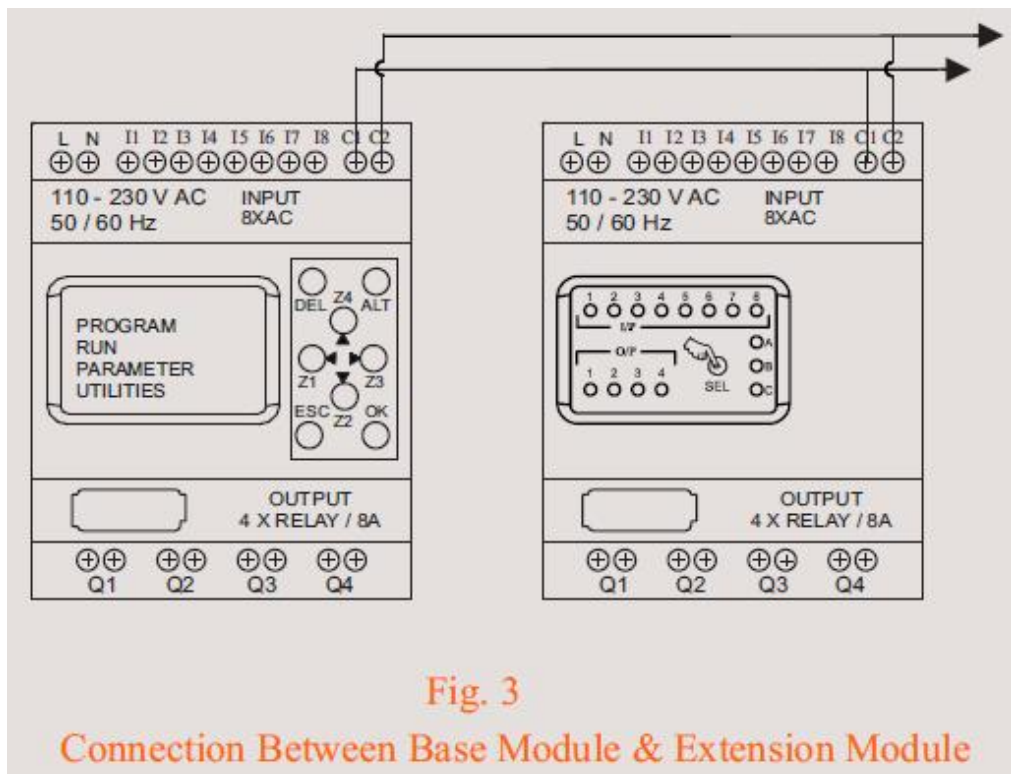


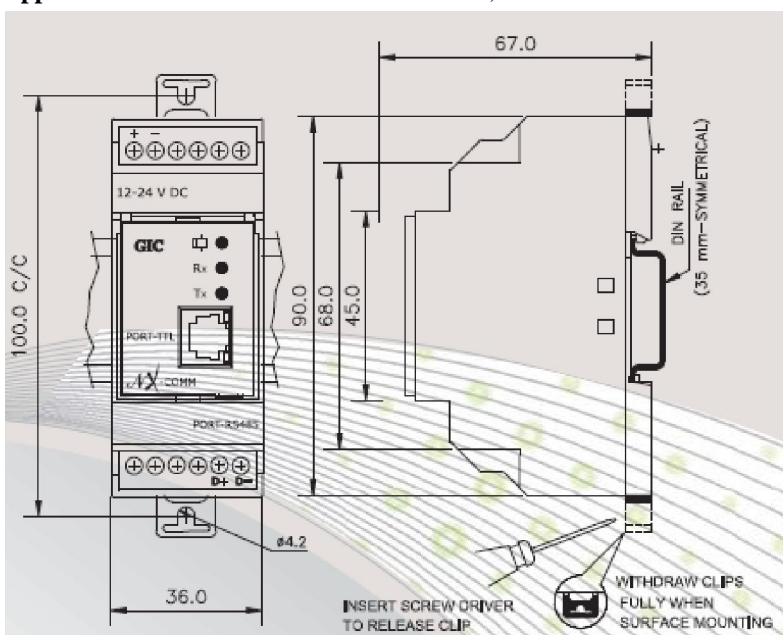
Fig. 3

Connection Between Base Module & Extension Module

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AX-PLC-G7XDTR4 -RS 485 module **AC** & AX-PLC-G8XDTR4 -RS 485 module **DC**
Product Specification

Power Supply:	AC	110 to 240Vac - 20% +10%
	DC	12 to 24Vdc
Inputs:		TTL level
Outputs:		RS-485 Protocol (two wires D+ D-)
Number of Nodes:		32
Isolation Voltage:		2000Vrms
Modbus Communication:		yes -RTU Slave
Baud Rate:		300, 600, 1200, 2400, 4800, 9600
LED Indication:		Red LED for Tx & Rx Green for supply
Ambient Range:		0 to 55°C
Dimensions:		100 x 36 x 87 mm
Weight:		80gms
Approvals:		CE, UL



Memory card



Programming USB cable

