

Twido Programmable controllers

Compact bases



Type de base		Compact			
		Non expandable bases		Expandable bases	
Number of digital I/O		10	16	24	40
Number of digital inputs (24 VDC)		6 sink/source	9 sink/source	14 sink/source	24 sink/source
Number of digital outputs		4 relay (2 A)	7 relay (2 A)	10 relay (2 A)	14 relay (2 A), 2 solid-state (1 A)
Type of connection		Screw terminals (non removable)			
Possible I/O expansion modules		-		4	7
Counting		3 x 5 kHz, 1 x 20 kHz			
PWM positioning		-			
Serial ports		1 x RS 485		1 x RS 485; option: 1 x RS 232C or RS 485	
Protocol		Modbus master/slave, ASCII, I/O relocation			
Ethernet port		-		-	
Dimensions, W x D x H		80 x 70 x 90 mm	80 x 70 x 90 mm	95 x 70 x 90 mm	157 x 70 x 90 mm
References	Supply voltage 100...240 VAC	TWDLCAA10DRF	TWDLCAA16DRF	TWDLCAA24DRF	TWDLCAE40DRF (1)
	Supply voltage 19.2...30 VDC	TWDLCAA10DRF	TWDLCAA16DRF	TWDLCAA24DRF	TWDLCAE40DRF (1)
	Real-time clock (option)	TWDXCPRTC			
	Display unit (option)	TWDXCPODC			
	Memory cartridge (option)	TWDXCPMFK32 (3)			TWDXCPMFK64 (4)

(1) 40 I/O version without Ethernet also available: TWDLCAA40DRF and TWDLCAE40DRF

Modular bases



Type of base		Modular		
Number of digital I/O		20		40
Number of digital inputs (24 VDC)		12 sink/source	12 sink/source	24 sink/source
Number of digital outputs		8 transistor, source (0.3 A)	6 relay (2 A) & 2 trans., source (0.3 A)	16 transistor, source (0.3 A)
Type of connection		HE10 connector		Removable screw terminals
Possible I/O expansion modules		4		7
Supply voltage		24 VDC		
Counting		2 x 5 kHz, 2 x 20 kHz		
PLS/PWM positioning		2 x 7 kHz		
Serial ports		1 x RS 485; option: 1 x RS 232C or RS 485		
Protocol		Modbus master/slave, ASCII, I/O relocation		
Dimensions, W x D x H		35.4 x 70 x 90 mm	47.5 x 70 x 90 mm	47.5 x 70 x 90 mm
References		TWDLMDA20DTK (2)	TWDLMDA20DRT	TWDLMDA40DTK (2)
	Real-time clock (option)	TWDXCPRTC		
	Display unit (option)	TWDXCPODM		
	Memory cartridge (option)	TWDXCPMFK32 (3)	TWDXCPMFK64 (4)	

(2) Sink version transistor outputs also available: TWDLMDA20DUK and TWDLMDA40DUK

(3) Application backup, program transfer

(4) Memory expansion, application backup, program transfer

I/O expansion modules

For I/O expansion modules, please consult Modicon TM2 page 2/21

Communication modules



Type of module	Serial interface			Serial interface adaptor		
	Physical layer (non isolated)	RS 232C	RS 485		RS 232C	RS 485
Connection	Mini-DIN connector	Screw terminals		Mini-DIN connector	Screw terminals	
Protocol	Modbus master/slave, ASCII, I/O relocation					
Twido base compatibility	Modular base TWDLMDA			Compact base TWDLCAA16/24DRF Modular base via integrated display module TWDXCPODM		
References	TWDNOZ232D	TWDNOZ485D	TWDNOZ485T	TWDNAC232D	TWDNAC485D	TWDNAC485T



Type of module	Modem for Twido	CANopen expansion	Ethernet interface	Modbus isolation module	Modbus junction module
Number of modules	–	1	1	–	–
Connection	–	SUB-D9	RJ45	RJ45	RJ45
Twido base compatibility	–	20, 24 or 40 I/O base	All models	All models	All models
References	SR2MOD03	TWDNCO1M	499TWD01100	TWDXCAISO	TWDXCAT3RJ

(1) 2 modules max., 62 digital slaves max., 7 analogue slaves max., AS-Interface/M3, V 2.11 (profile S.7.4 not supported)

Programming software



Software, connecting cables, interfaces	TwidoSuite software EN/FR	Connecting cables		Bluetooth® USB adaptor	Bluetooth® gateway
Application	PC with Windows XP or Vista	Twido/PC USB port	Twido/PC serial port	For PC not fitted with Bluetooth®	For Twido controller
References	TWDBTFU10M	TSXUSB485 TSXCRJMD25	TSXPCX1031	VW3A8115	VW3A8114

Modicon TM2 I/O expansion modules

For Modicon M238, Magelis XBTGC and Twido



Type of module		Analog inputs						
Number of inputs		2 I	2 I	4 I	8 I	8 I	8 I	8 I
Connection		Removable screw terminals						
Inputs		Range		Resolution		Supply voltage		Dimensions, W x D x H
	Range	Thermocouples type K, J, T	0...10 V (1) 4...20 mA (2)	0...10 V (1) 0...20 mA (2) θ °C	0...10 V (1) 0...20 mA (2)	PTC/NTC	Thermo probe Pt100 / Pt1000 -200...+600 °C	RJ11
	Resolution	12 bits (4096 points)			10 bits (1024 points)		12 bits (4096 points)	
Supply voltage		24 VDC						
Dimensions, W x D x H		23.5 x 70 x 90 mm					39.1x70x90 mm	
References		TM2AMI2LT	TM2AMI2HT	TM2AMI4LT	TM2AMI8HT	TM2ARI8HT	TM2ARI8LT	TM2ARI8LRJ

(1) Non differential

(2) Differential



Type of module		Analog Outputs, Inputs/Outputs (mixed)				
Number of inputs and/or outputs		1 O	2 O	2 I / 1 O	2 I / 1 O	4 I / 2 O
Connection		Removable screw terminals				
Inputs		Range		Resolution		Supply voltage
	Range	–	–	0...10 V (1) 4...20 mA (2)	Thermocouple type K, J & T 3-wire Pt 100 thermal probe	0...10 V (1) 4...20 mA (2)
	Resolution	–	–	12 bits (4096 points)	12 bits (4096 points)	12 bits (4096 points)
Outputs		Range		Resolution		Supply voltage
	Range	0...10 V (1) 4...20 mA (2)	± 10 V	0...10 V (1) 4...20 mA (2)	0...10 V (1) 4...20 mA (2)	0...10 V (1) 4...20 mA (2)
	Resolution	12 bits	11 bits + sign	12 bits	12 bits	12 bits
Supply voltage		24 VDC				
Dimensions, W X D x H		23.5 x 70 x 90 mm				
References		TM2AMO1HT	TM2AVO2HT	TM2AMM3HT	TM2ALM3LT	TM2AMM6HT

(1) Non differential

(2) Differential



Type of module		Digital Inputs/Outputs						
Number of inputs and/or outputs		8	16	16	32	4 I / 4 O	16 I / 8 O	
Connection		Removable screw terminals			HE10 connectors		Removable screw terminals	Spring terminals (non removable)
References		Inputs		Outputs		Inputs, 24 VDC + Outputs, Relais 2 A		
	24 VDC sink	TM2DDI8DT	–	–	–	–	–	
	24 VDC sink/source	–	TM2DDI16DT	TM2DDI16DK	TM2DDI32DK	–	–	
	120 V sink	TM2DAI8DT	–	–	–	–	–	
	Relay (2 A)	TM2DRA8RT	TM2DRA16RT	–	–	–	–	
	Transistor, source 0.5 A	TM2DD08TT	–	–	–	–	–	
	Transistor, source 0.4 A	–	–	TM2DD016TK	TM2DD032TK	–	–	
	Transistor, sink 0.1 A	TM2DDO8UT	–	TM2DDO16UK	TM2DDO32UK	–	–	
	Inputs, 24 VDC + Outputs, Relais 2 A	–	–	–	–	TM2DMM8DRT	TM2DMM24DRF	