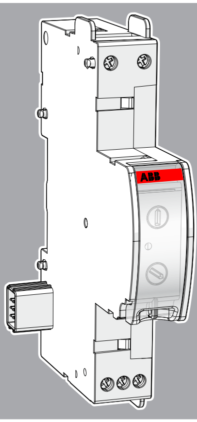


ARBus

GB RS485 modbus module for F-ATI and F-ARI Test

IT Modulo modbus RS485 per F-ATI Test e F-ARI Test

DE Modbus-Modul RS485 für F-ATI Test und F-ARI Test

ES Módulo modbus RS485 para F-ATI Test y F-ARI Test

FR Module modbus RS485 pour F-ATI Test et F-ARI Test

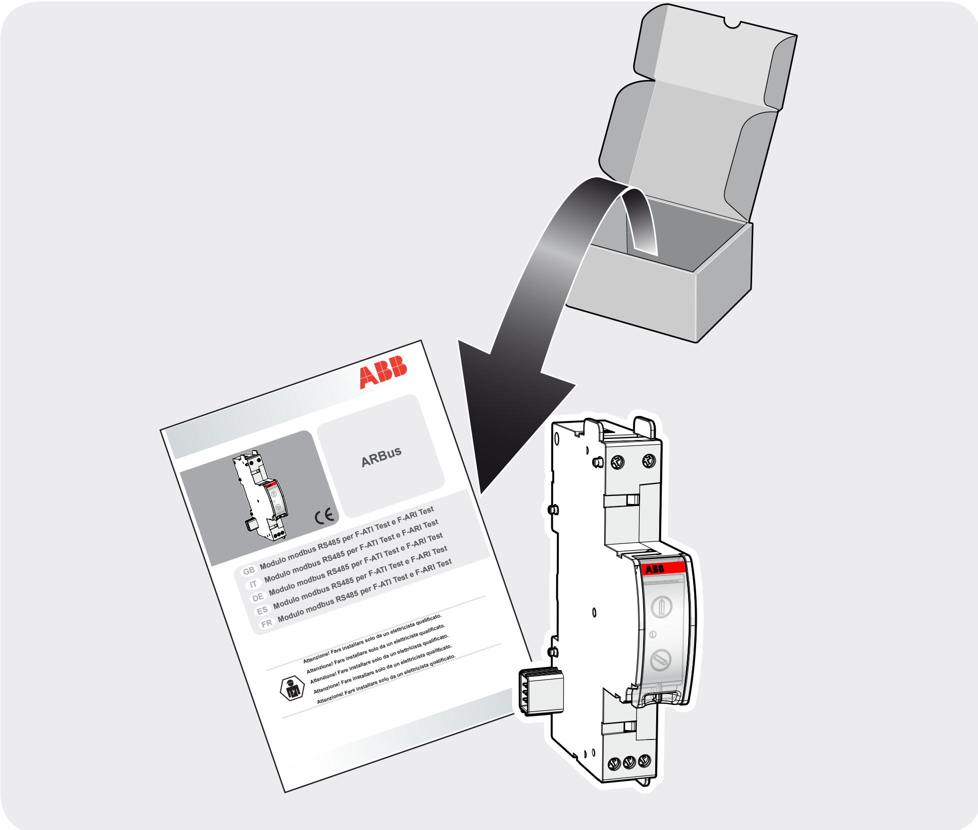
Warning! Installation should be performed only by a qualified electrician.

Attenzione! Fare installare solo da un elettricista qualificato.

Achtung! Nur von einem qualifizierten Elektriker installieren lassen.

¡Atención! Únicamente puede ser instalado por un electricista cualificado.

Attention ! Confier l’installation exclusivement à un électricien qualifié.

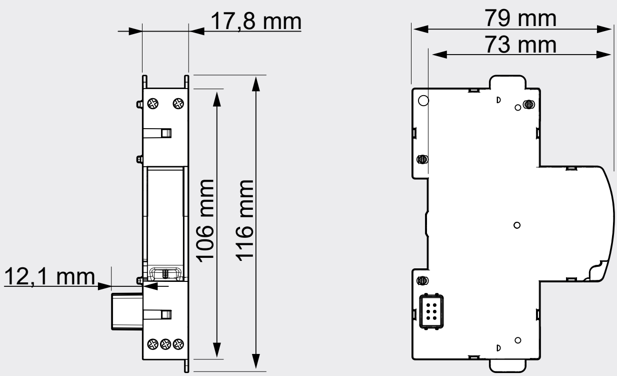


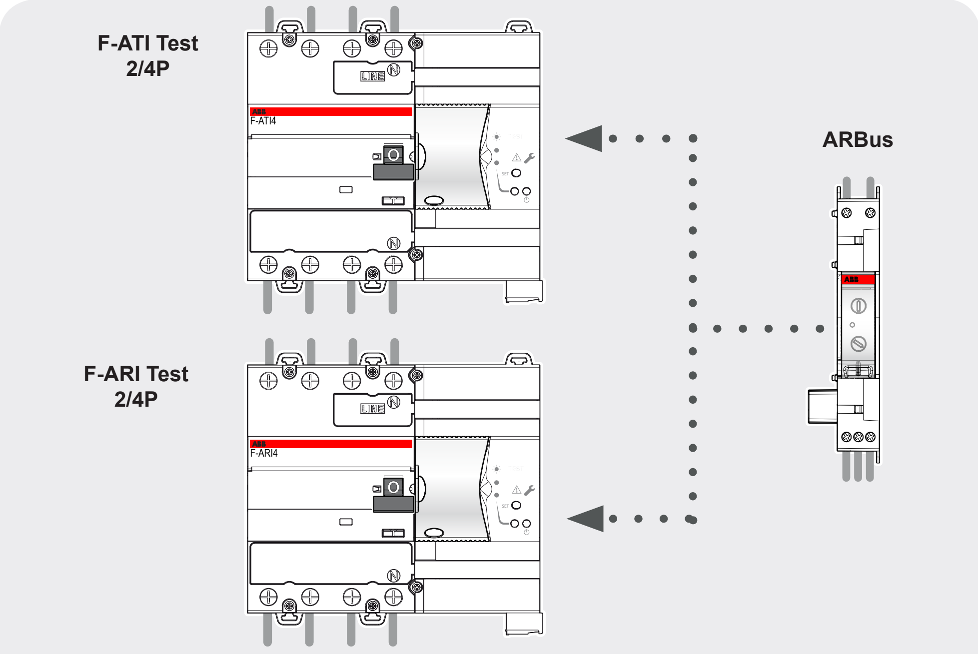
ARBus	2CSF300130R1989

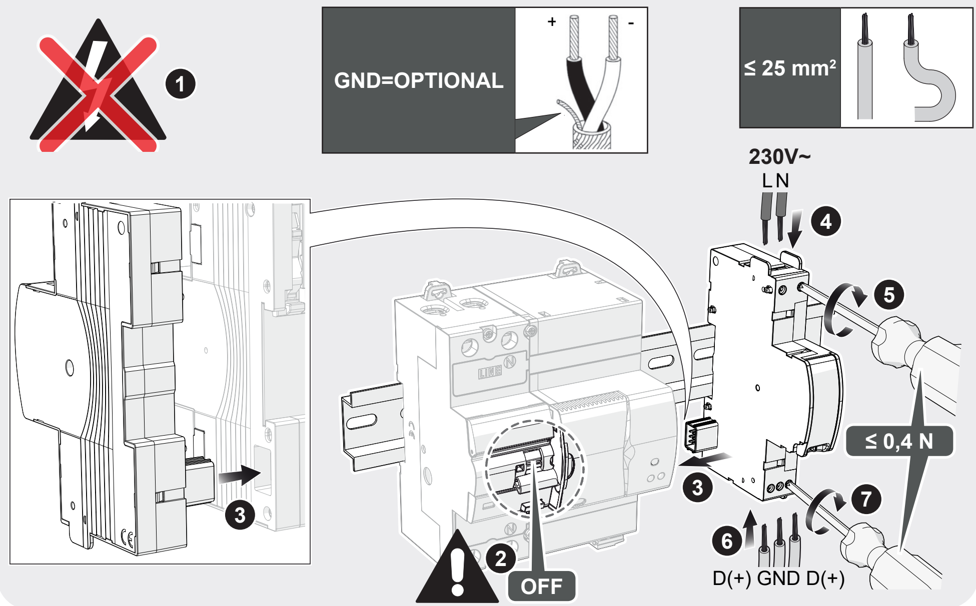
TECHNICALDATA/SPECIFICHETECNICHE/LEISTUNGSMERKMALE/ESPECIFICACIONES TÉCNICAS / SPÉCIFICATIONS TECHNIQUES

Electrical features	Rated voltage U_e	230 V a.c. -15% ÷ 10%
	Rated frequency	50 Hz
	Insulation voltage U_i	500 V d.c.
	Rated impulse withstand voltage (1,2/50) U_{imp}	4 kV
	Power consumption	1 W
Installation	Terminals	2,5 mm^2
	Tightening torque	0,4 Nm
	Ambient temperature	-25…+60 °C
	Storage temperature	-40…+70 °C
Communication	Protocol	Modbus RS485
	Baud rate	38400
	Addresses	1…99
Dimensions	DIN modules	1
	Weight	180 gr

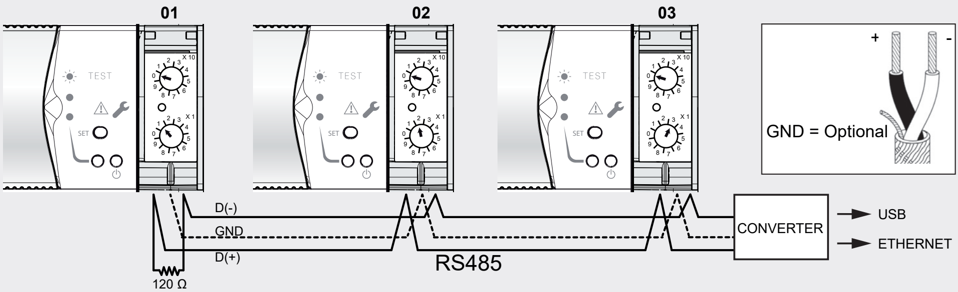
OVERALL DIMENSIONS / INGOMBRO / ABMESSUNGEN / DIMENSIONES / DIMENSIONS HORS-TOUT

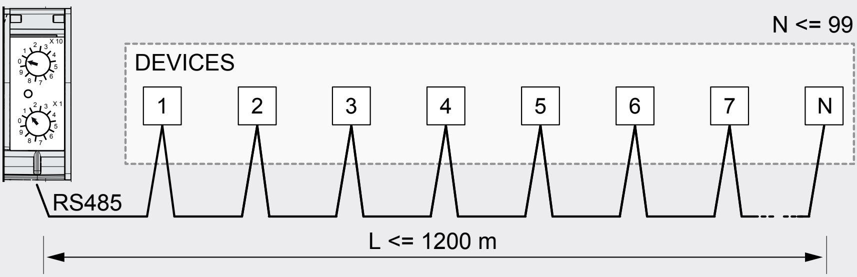



F-ATI Test
2/4P
LINE
F-ATI4
F-ARI Test
2/4P
LINE
F-ARI4
ARBus


1
GND=OPTIONAL
+
-
≤ 25 mm²
230V~
L N
4
5
3
≤ 0,4 N
3
7
6
2
OFF
D(+) GND D(+)

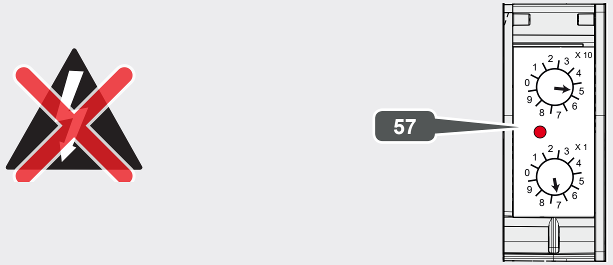
EXAMPLE OF A SYSTEM / ESEMPIO DI IMPIANTO / ANORDNUNGSBEISPIEL / EJEMPLO DE INSTALACIÓN / EXEMPLE D'INSTALLATION



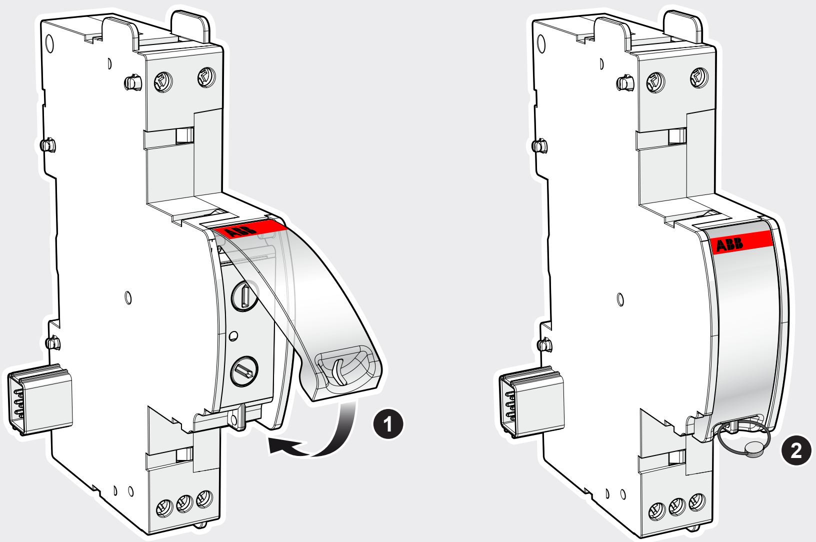


The higher the number of devices, the higher will be the response delay.
Maggiore è il numero di dispositivi, maggiore sarà il tempo di risposta.
Je mehr Geräte vorhanden sind, desto länger die Ansprechverzögerung.
Cuanto mayor sea el número de dispositivos, mayor será el retraso de la respuesta.
Plus haut est le nombre de dispositifs, plus le temps de réponse sera long.

ADDRESSING / INDIRIZZAMENTO / ADRESSIERUNG / DIRECCIONAMIENTO / ADRESSAGE



SEALABILITY / PIOMBABILITÀ / VERPLOMBBARKEIT / APLICABILIDAD DE PRECINTO DE SEGURIDAD / PIOMBABILITÉ



COMMUNICATION SETTINGS / IMPOSTAZIONI DI COMUNICAZIONI / KOMMUNIKATIONSEINSTELLUNGEN / CONFIGURACIÓN DE LA COMUNICACIÓN / SÉLECTIONS DE COMMUNICATIONS

Protocol	Modbus RTU
Baud Rate	38400
Data bit	8
Stop bit	1
Parity	No parity
Read holding register	0x03
Write multiple register	0x16
Inverted Byte	0xABCD → 0xCDAB if not differently specified

LEGEND / LEGENDA /LEGENDE / LEYENDA / LÉGENDE

Fixed LED / LED Fisso / Permanent leuchtende LED / Led fijo / DEL Fixe

Module supplied and connected correctly / Modulo alimentato e connesso correttamente / Modul unter Spannung und ordnungsgemäß angeschlossen / Módulo alimentado y conectado correctamente / Module sous-tension et correctement connecté

Semi-intermittent LED / LED Semi-intermittente / Intermittierend aufleuchtende LED / Led Semiintermittente / DEL Semi-clignotante

RS485 communication in progress / Comunicazione RS485 in corso / RS485-Kommunikation wird hergestellt / Comunicación RS485 en curso / Communication RS485 en cours

Flashing LED / LED Lampeggiante / Blinkende LED / Led intermitente / DEL Clignotante

Anomalous communication between F-ATI & F-ARI and BUS module / Comunicazione anomala tra F-ATI & F-ARI e modulo BUS / Kommunikationsstörung zwischen F-ATI & F-ARI und BUS-Modul / Anomalía en la comunicación entre F-ATI & F-ARI y módulo BUS / Communication anormale entre F-ATI & F-ARI et le module BUS

ADDRESS TABLE / TABELLA INDIRIZZI / TABELLE ADRESSEN / TABLA DIRECCIONES / TABLEAU ADRESSES

Address	#Reg	Type	Values	Description	U.M.	F-ATI Test	F-ARI Test
				Reading			
40001	4	Identification code	-	Not inverted byte (Es. “0200000000000000”)	Char	✓	✓
40006	1	Lever position	0x0000	OFF	BIN	✓	✓
			0x0001	ON		✓	✓
40012	1	Device status	0x0001	Enabled device	BIN	✓	✓
			0x0002	Disabled device	BIN	✓	✓
			0x0003	Test of the installation and RCCB automatic reclosing in progress	BIN	-	✓
			0x0004	RCCB self test in progress (Autotest)	BIN	✓	✓
			0x0006	Wait status due to low system insulation value	BIN	-	✓
			0x0007	Blocked status due to 4 consecutive trips (1 trip for AT version)	BIN	✓	✓
			0x000A	Lever in OFF position due to remote control	BIN	✓	✓
40013	1	Type of RCCB fault[2]	0x0000	None	BIN	✓	✓
			0x0001	Anomaly in the device functionality (code 1)	BIN	✓	✓
			0x0002	Anomaly in the device functionality (code 2)	BIN	✓	✓
			0x0004	Anomaly in the device functionality (code 3)	BIN	✓	✓
			0x0008	Anomaly in the device functionality (code 4)	BIN	✓	✓
			0x0100	Critical fault of the device (code 9)	BIN	✓	✓

Address	#Reg	Type	Values	Description	U.M.	F-ATI Test	F-ARI Test
				Reading			
40013	1	Type of RCCB fault(2)	0x0200	Anomaly in the device functionality (code 10)	BIN	✓	✓
			0x0400	Critical fault of the device (code 11)	BIN	✓	✓
			0x1000	Anomaly in the device functionality (code 13)	BIN	✓	✓
			0x2000	Anomaly in the device functionality (code 14)	BIN	✓	✓
			0x4000	Anomaly in the device functionality (code 15)	BIN	✓	✓
			0x8000	Anomaly in the device functionality (code 16)	BIN	✓	✓
40015	1	Tipology of trip	0x0001	Differential relay trip	BIN	✓	✓
			0x0003	Electronic differential relay trip	BIN	✓	✓
40016	1	Type of device	0x0000	None	BIN	✓	✓
			0x0002	Restart Autotest PRO	BIN	-	✓
			0x0003	Restart Autotest PRO	BIN	-	✓
			0x0004	Autotest	BIN	✓	-
40018	1	Last type of autotest done	0x0000	Manual	BIN	✓	✓
			0x0001	Automatic	BIN	✓	✓
			0x0002	Remote	BIN	✓	✓
40019	1	Aux contact status	0x0000	Disabled	BIN	✓	✓
			0x0001	Enabled	BIN	✓	✓
40020	1	Aux contact setting	0x0000	NO	BIN	✓	✓
			0x0001	NC	BIN	✓	✓
			0x0002	NC+pulse	BIN	✓	✓

Address	#Reg	Type	Values	Description	U.M.	F-ATI Test	F-ARI Test
				Reading			
40021	1	LED Status	0xABCD	A = not used B = LED DX green C = LED SX red D = LED SX green (except RD, RM versions) C+D = LED SX yellow (except RD, RM versions) Admitted LED values: 0x1 = OFF 0x2 = ON 0x3 = 1 HZ DUTY 50% 0x4 = 10 HZ DUTY 50% 0x5 = ON per 5s, OFF per 150ms,ON per 250ms, OFF per 150ms 0x7 = ON per 1s, OFF per 150ms,ON per 250ms, OFF per 150ms	BIN	✓	✓
40023	1	Number of correct RCCB autotest done	-	-	DEC	✓	✓
40024	1	Total number of RCCB autotest	-	-	DEC	✓	✓
40025	4	FW Code	-	Not inverted byte (Eg. “6.04.004”)	CHAR	✓	✓
40029	1	Total number of automatic reclosing	-	-	DEC	-	✓
40032	1	Autotest	0x0001	Launch the RCCB test	BIN	✓	✓
40034	1	Reset	0x0001	Check the system, remove the block status, reclose the RCD	BIN	-	✓
40035	1	Auxiliary contact	0x0001	NO	BIN	✓	✓
			0x0002	NC	BIN	✓	✓
			0x0003	NC+pulse (only for AT)	BIN	✓	✓
40036	1	Lever OFF	0x0001	Lever OFF	BIN	✓	✓
40037	1	Lever ON	0x0001	Lever ON	BIN	✓	✓

(1) Warning: The commands sent to the module are stored and executed as soon as possible (also with slide’s open).
Eg if the lever is OFF and a command is sent Autotest, it will be executed immediately after the handle ON command.
(2) It may occur more than one faulty.
U.M. = unit of measure
V: Volt Char: character
DEC: unsigned integer
BIN: binary value

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