Per un'installazione corretta e sicura del modulo MBC V, consultare il foglio tecnico 8541695 incluso nella confezione.
To guarantee a correct and safe installation of the bus MBC V , refer to the technical sheet 8541695 included in the package



CONTENUTO IMBALLO

(I) Moduli Bus di campo.
La presente guida di installazione.

PACKAGE CONTENTS

(EN) Fieldbus modules.
This quick installation guide.

CONTENUE DE L'EMBALLAGE

(FR) Modules de bus de terrain.
Le présent guide d'installation.

PACKUNGSINHALT

(D) Feldbus-Module.
Die vorliegende Installierungsanleitung.

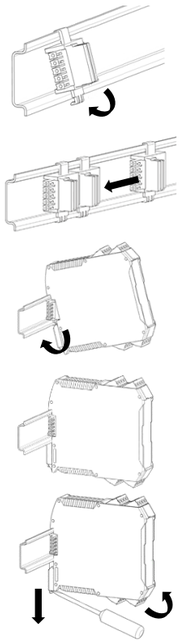
CONTENIDO DEL EMBALAJE

(E) Módulos de bus de campo.
La presente guida de instalación.

(I)	Per installare e utilizzare in modo corretto e sicuro il modulo, è NECESSARIO consultare il manuale contenuto all'URL:	**FIELDBUS MODULES**
(EN)	To guarantee a correct and safe installation and operation of the module, it is MANDATORY to consult the user manual contained at URL:	
(FR)	Pour installer et utiliser correctement et en sécurité le module, il est NECESSAIRE de consulter le manuel d'instruction qui est contenu à l'URL:	
(D)	Um das Modul korrekt und sicher zu installieren und zu verwenden, MÜSSEN Sie das unter der URL enthaltene Handbuch konsultieren:	
(E)	Para instalar y utilizar el módulo de forma correcta y segura, DEBE consultar el manual que se encuentra en la URL:	

www.reersafety.com/it/en/products/safety-controllers

A) MONTAGGIO MECCANICO - MECHANICAL ASSEMBLY - MONTAGE MECANIQUE - BEFESTIGUNG - MONTAJE MECÁNICO



(I)
Le operazioni che seguono devono essere effettuate in assenza di alimentazione.
Fissare alla barra Omega DIN 35mm (EN 5022) un numero di connettori posteriori "MSC" a 5 poli uguale al numero di moduli da montare (agganciandoli prima in alto). Collegare fra loro i connettori appena montati. Fissare quindi i moduli alla barra ponendo attenzione a inserire la contattiera posta sul fondo del modulo sul rispettivo connettore. Premere il modulo delicatamente fino a sentire lo scatto del bloccaggio. Per rimuovere un modulo è necessario tirare verso il basso (utilizzando un cacciavite) il gancio di arresto posto sul retro del modulo; sollevare quindi il modulo dal basso e tirare.

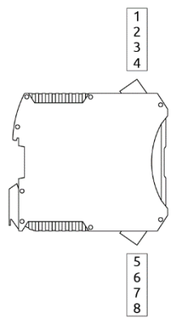
(EN)
Do not apply power supply before carry out the following operations.
Fix to the Omega DIN 35mm (EN 5022) the same number of "MSC" 5-pole rear panel connectors as the number of units to be installed (hooking them at the top first). Connect between them the connectors just mounted. Fasten the units to the rail, arranging the contacts on the base of the unit on the respective connector. Press the unit gently until you feel it snap into place. To remove a unit, use a screwdriver to pull down the locking latch on the back of the unit; then lift the unit upwards and pull.

(FR)
Les opérations suivantes doivent être effectuées en l'absence d'alimentation.
Fixer à la barre oméga DIN 35mm (EN 5022) un nombre de connecteurs arrière "MSC" à 5 pôles égal au nombre de modules à monter (en les accrochant d'abord en haut). Connectez ensemble les connecteurs nouvellement montés. Fixer ensuite les modules à la barre en faisant attention d'introduire le contact situé sur le fond du module dans le connecteur correspondant. Appuyer délicatement sur le module jusqu'à entendre le déclic de blocage. Pour enlever un module, il faut tirer vers le bas (à l'aide d'un tournevis) le crochet d'arrêt situé à l'arrière du module; puis soulever le module par le bas et tirer.

(D)
Die im Anschluss beschriebenen Vorgänge müssen bei unterbrochener Stromversorgung ausgeführt werden.
Befestigen Sie an der DIN 35mm-Omega-Schiene (EN 5022) eine der Anzahl der zu montierenden Module entsprechende Anzahl von 5-poliger "MSC"-Rücksteckern (zuerst oben einhängen). Verbinden Sie die neu montierten Stecker miteinander. Dann die Module an der Schiene befestigen und dabei darauf achten, die Kontaktvorrichtung auf dem Boden des Moduls auf den entsprechenden Verbinder zu setzen. Das Modul vorsichtig einsetzen, bis das Einrasten zu hören ist. Um das Modul zu entfernen, muss (unter Verwendung eines Schraubenziehers) der Sperrhaken auf der Rückseite des Moduls nach unten gezogen und dann das Modul von unten angehoben und nach oben gezogen werden.

(E)
Las siguientes operaciones se deben llevar a cabo con la alimentación cortada.
Fije a la barra Omega DIN 35mm (EN 5022) un número de conectores traseros "MSC" de 5 polos igual al número de módulos a montar (enganchándolos primero en la parte superior). Conecte los conectores recién montados. Luego, fijar los módulos en la barra comprobando la introducción del elemento de contacto, presente en la parte inferior del módulo, en el conector correspondiente. Ejercer una delicada presión sobre el módulo hasta sentir el chasquido de bloqueo. Para retirar un módulo es necesario tirar hacia abajo (utilizando un destornillador) el gancho de fijación presente en la parte trasera del mismo; luego, alzar el módulo desde abajo y tirar.

B) MORSETTIERE - TERMINAL BLOCKS - BORNIERS - ANSCHLUSSKLEMMEN - TERMINALES



TERMINAL	SIGNAL	DESCRIPTION
1	**24VDC**	24VDC power supply
2	**-**	
3	**-**	
4	**0VDC**	0VDC power supply
5	**-**	
6	**RS-485 -(A)**	Serial line RS-485 -(A)
7	**0VDC**	0VDC power supply
8	**RS-485 +(B)**	Serial line RS-485 +(B)

C) SEGNALAZIONI - STATUS INDICATORS - INDICATEURS - STATUSANZEIGEN - INDICADORES DE ESTADO

MEANING	LED					
	ON	RUN	IN FAIL	EXT FAIL	*LED1**	*LED2**
	GREEN	GREEN	RED	RED	RED/GREEN	RED/GREEN
Startup - Initial test	**ON**	**ON**	**ON**	**ON**	ON	ON
Waiting for configuration from Master	**ON**	**OFF**	**OFF**	**OFF**	***See the modules tables***	
Received configuration from Master	**ON**	**ON**	**OFF**	**OFF**		

*Not present on MBU Module



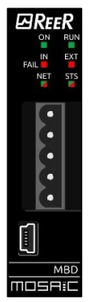
MBP		
LED **MODE**		
STATUS	**INDICATION**	**DESCRIPTION**
GREEN	On-line	Data exchange
GREEN blinking	On-line	CLEAR
RED blinking (1 flash)	Parameterization error	Rif. IEC 61158-6
RED blinking (2 flashes)	PROFIBUS configuration error	Configuration data MASTER or MBP wrong

LED **STS**		
STATUS	**INDICATION**	**DESCRIPTION**
OFF	MBP not initialized	Status SETUP o NW_INIT
GREEN	Initialized	End of initialization NW_INIT
GREEN blinking	Initialized with diagnostic active	EXTENDED DIAGNOSTIC bit set
RED	Exception error	EXCEPTION status



MBC		
LED **OPR**		
STATUS	**INDICATION**	**DESCRIPTION**
GREEN	OPERATIONAL	OPERATIONAL status
GREEN blinking slow	PRE-OPERATIONAL	PRE-OPERATIONAL status
GREEN 1 flash	STOPPED	STOPPED status
GREEN blinking fast	Autobaud	Baud rate detection
RED	EXCEPTION	EXCEPTION status

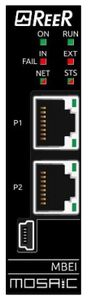
LED **ERR**		
STATUS	**INDICATION**	**DESCRIPTION**
OFF	-	Normal operation
RED 1 flash	Warning level	A bus error counter has reached the warning level
RED blinking fast	LSS	LSS service operative
RED 2 flashes	Event Control	Detected Node Guarding (NMT master or slave) or Heartbeat (Consumer)
RED	Lack of BUS	BUS not working



MBD		
LED **NET**		
STATUS	**INDICATION**	**DESCRIPTION**
GREEN	On-line connected	1 or more connections established
GREEN blinking (1Hz)	On-line not connected	No connection established
RED	Critical connection error	MBD unable to communicate
RED blinking (1Hz)	Time-out of 1 or more connection	One or more I/O device in time-out
GREEN/RED alternate	TEST	MBD in Test

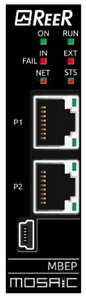
LED **STS**		
STATUS	**INDICATION**	**DESCRIPTION**
GREEN	-	Normal operation
GREEN blinking (1Hz)	Pending	Configuration incomplete, MBD waiting for activation
RED	Fatal Error	One or more unrecoverable errors detected
RED blinking (1Hz)	Error	One or more recoverable errors detected
GREEN/RED alternate	TEST	MBD in Test

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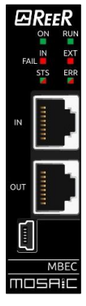
MBEI		
LED **NET**		
STATUS	**INDICATION**	**DESCRIPTION**
OFF	-	No power or no IP address
GREEN	On-line connected	1 or more connections established
GREEN blinking	On-line not connected	No connection established
RED	IP address	Duplicate IP address
RED blinking	Timeout	Connection Timeout

LED **STS**		
STATUS	**INDICATION**	**DESCRIPTION**
OFF	-	No power
GREEN	-	Normal operation
GREEN blinking	Pending	Not configured
RED	Fatal Error	One or more unrecoverable errors detected
RED blinking	Error	One or more recoverable errors detected



MBEP		
LED **NET**		
STATUS	**INDICATION**	**DESCRIPTION**
OFF	Offline	• No power • Connection with IO controller not present
GREEN	On-line (RUN)	• Established connection with IO controller • IO controller in RUN state
GREEN blinking (1 flash)	On-line (STOP)	• Established connection with IO controller • IO controller in STOP state or IO data bad • IRT synchronization not finished
GREEN blinking	Blink	Used to identify the network node
RED	Fatal event	Major internal error - **combined with a red module STS led**
RED blinking (1 flash)	Station Name error	Station Name not set
RED blinking (2 flashes)	IP address error	IP address not set
RED blinking (3 flashes)	Configuration error	Expected identification differs from real identification

LED **STS**		
STATUS	**INDICATION**	**DESCRIPTION**
OFF	Not initialized	No power or Module in SETUP or NW_INIT state
GREEN	Normal operation	Module has shifted from the NW_INIT state
GREEN blinking (1 flash)	Diagnostic event (s)	Diagnostic event (s) present
RED	Exception error	Device in state EXCEPTION
	Fatal Event	Major internal error - **combined with a red NET led module**
GREEN/RED alternate	Error	Do NOT power off the module. It could cause a permanent damage.



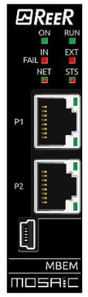
MBEC		
LED **STS**		
STATUS	**INDICATION**	**DESCRIPTION**
OFF	INIT	INIT or no power
GREEN	OPERATIONAL	OPERATIONAL state
GREEN blinking	PRE-OPERATIONAL	PRE-OPERATIONAL state
GREEN blinking (1 flash)	SAFE-OPERATIONAL	SAFE-OPERATIONAL state
Flickering	BOOT	Module in BOOT state
RED	(Fatal event)	System locked

LED **ERR**		
STATUS	**INDICATION**	**DESCRIPTION**
OFF	No error	No error or no power
RED blinking	Configuration not valid	Status change requested by master not possible
RED blinking (1 flash)	Unsolicited state change	Slave device application has changed the module state
RED blinking (2 flashes)	Watchdog timeout	Synch manager watchdog timeout
RED	Controller failure	Anybus module in EXCEPTION state
Flickering	Booting error	E.g. due to firmware download failure



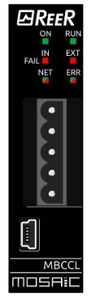
MBMR		
LED **NET**		
STATUS	**INDICATION**	**DESCRIPTION**
OFF	-	No power or no data exchange
YELLOW	Frame Reception or Transmission	Data exchange
RED	Fatal error	One or more non-recoverable errors detected

LED **STS**		
STATUS	**INDICATION**	**DESCRIPTION**
OFF	-	Initializing or no power
GREEN	Module initialized	Module initialized – no error
RED	Fatal Error	One or more non-recoverable errors detected
RED blinking (1 flash)	Communication fault or configuration error	• Invalid setting in Network Configuration Object • Setting in Network Configuration Object has been changed during operation
RED blinking (2 flashes)	Error	Do NOT power off the module. It could cause a permanent damage.



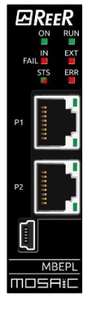
MBEM		
LED **NET**		
STATUS	**INDICATION**	**DESCRIPTION**
OFF	-	Module in EXCEPTION state or no IP address
GREEN	On-line	At least one message received
GREEN blinking	On-line	Waiting for first message
RED	Fatal Error	IP address conflict
RED blinking	Time-out	Connection Timeout. No message received

LED **STS**		
STATUS	**INDICATION**	**DESCRIPTION**
OFF	-	No power
GREEN	Pending	Normal operation
RED	Fatal Event	Major fault; module in state EXCEPTION
RED blinking	Error	Minor fault detected
GREEN/RED alternate	TEST	Firmware update from file system in progress



MBCCL		
LED **NET**		
STATUS	**INDICATION**	**DESCRIPTION**
OFF	-	No network participation, timeout status (no power)
GREEN	-	Normal operation
RED	Fatal error	Major fault

LED **ERR**		
STATUS	**INDICATION**	**DESCRIPTION**
OFF	No error (no power)	Normal operation
RED	Fatal Event	Exception or major fault
RED flickering	CRC (Temporary flickering)	CRC Error
RED flashing	PARAMETERS (Continuous flashing)	Station Number or Baud Rate has changed since startup



MBEPL		
LED STS		
STATUS	**INDICATION**	**DESCRIPTION**
OFF	Off	Module is off, initializing, or not active.
GREEN fast flashing (on/off 50 ms)	NMT_CS_BASIC_ETHERNET	Basic Ethernet state: no POWERLINK traffic has been detected.
GREEN single flash	NMT_CS_PRE_OPERATIONAL_1	Only asynchronous data.
GREEN double flash	NMT_CS_PRE_OPERATIONAL_2	Asynchronous and synchronous data. No PDO data. Any process data sent is declared not valid a d received process data must be ignored in this state.
GREEN triple flash	NMT_CS_READY_TO_OPERATE	Ready to operate. Asynchronous and synchronous data. No PDO data. Any process data sent is declared not valid and received process data must be ignored in this state.
GREEN	NMT_CS_OPERATIONAL	Fully operational. Asynchronous and synchronous data. PDO data is sent and received.
GREEN slow flashing (on/off 200 ms)	NMT_CS_STOPPED	Module stopped (for controlled shutdown, for example). Asynchronous and synchronous data. No PDO data. Any process data sent is declared not valid and received process data must be ignored in this state.
RED	Error	If the ERROR LED also is red, a fatal event was encountered.

LED **ERR**		
STATUS	**INDICATION**	**DESCRIPTION**
OFF	No error	No error.
RED	Error	If the STATUS LED is not red, a non-fatal error has been detected. If the STATUS LED is red, a fatal event was encountered.

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