

MECHANICAL ASSEMBLY

Do not apply power supply before carry out the following operations.

Fasten the module to the DIN rail. Press the unit gently until you feel it snap into place.

To remove the module, use a screwdriver to pull down the locking latch on the back of the unit; then lift the unit upwards and pull.

MONTAGGIO MECCANICO

Le operazioni che seguono devono essere effettuate in assenza di alimentazione.

Fissare il modulo alla barra DIN premendolo 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.

MONTAGE MECANIQUE

Les opérations suivantes doivent être effectuées en l'absence d'alimentation.

Montez le module sur la barre DIN en appuyant doucement sur le module jusqu'à ce que vous entendiez le verrouillage du module.

Pour démonter un module, vous devez tirer vers le bas (à l'aide d'un tournevis) sur le crochet de retenue situé à l'arrière du module, puis soulever le module par le bas et tirer.

BEFESTIGUNG

Die im Anschluss beschriebenen Vorgänge müssen bei unterbrochener Stromversorgung ausgeführt werden.

Befestigen Sie das Modul auf der DIN-Hutschiene, indem Sie es vorsichtig nach unten drücken, bis es einrastet.

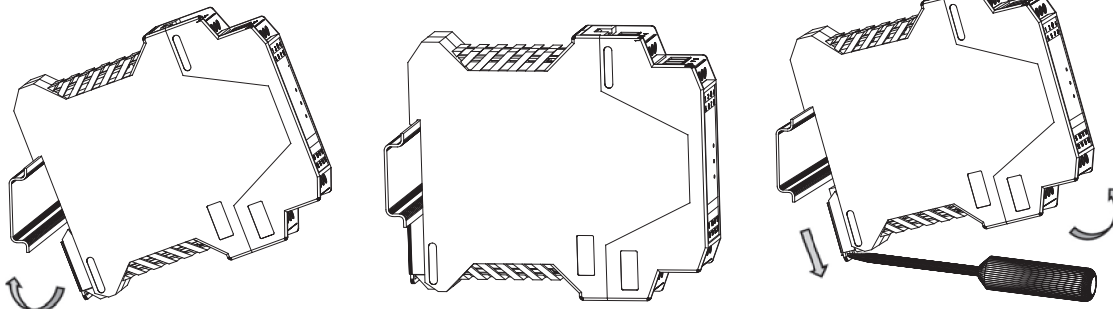
Um ein Modul zu entfernen, müssen Sie (mit einem Schraubendreher) den Haltehaken auf der Rückseite des Moduls nach unten ziehen, dann das Modul von unten anheben und abziehen.

MONTAJE MECÁNICO

Las siguientes operaciones se deben llevar a cabo con la alimentación cortada.

Enganche el módulo a la barra DIN presionandolo delicadamente hasta que escuche el bloqueo del módulo.

Para retirar un módulo debe tirar hacia abajo (con un destornillador) del gancho de retención en la parte posterior del módulo, luego levante el módulo por la parte inferior y tire.



Mechanical assembly-disassembly / Montaggio-smontaggio meccanico

TERMINAL BLOCKS OF MODULE

MORSETTIERE DEL MODULO

BORNIERS DU MODULE

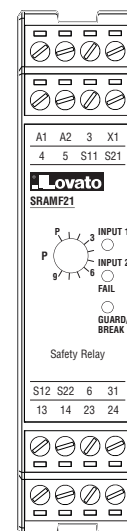
ANSCHLUSSKLEMMEN DES MODULS

TERMINALES DEL MÓDULO

| TERMINAL NUMBER | SIGNAL NAME | TYPE OF SIGNAL | DESCRIPTION |
|-----------------|------------------|----------------|---------------------------------------|
| A1 | 24VDC | - | Power supply 24VDC |
| A2 | 0VDC | - | Power supply 0VDC |
| 3 | PE | - | Ground connection |
| X1 | RESTART | Input | Restart command ① |
| 4 | n.c. | - | - |
| 5 | SYS_TEST | Input | Test for type 2 photocell application |
| S11 | INPUT1 | Input | Safety Input 1 |
| S21 | INPUT2 | Input | Safety Input 2 |
| S12 | TEST_OUT1 | Output | Test output 1 for mechanical switch |
| S22 | TEST_OUT2 | Output | Test output 2 for mechanical switch |
| 6 | K1 K2 (Feedback) | Input | Feedback external contactors K1K2 ② |
| 31 | SYSTEM STATUS | Output | Output status |
| 13 | Relay B NO1 | Output | Safety relay B, contact 1 (NO) |
| 14 | Relay B NO2 | Output | Safety relay B, contact 2 (NO) |
| 23 | Relay A NO1 | Output | Safety relay A, contact 1 (NO) |
| 24 | Relay A NO2 | Output | Safety relay A, contact 2 (NO) |

① (Mode 2M) When pin X1 is permanently connected to 24VDC the module works in Automatic Restart mode.

② When the K1 1 and K2 1 NC control contacts are not used (or no control is provided) it is mandatory to connect the terminal 11 (K1 K2 FEEDBACK) to terminal 12 (SYSTEM STATUS).



ELECTRICAL CONNECTIONS

By means of the rotary switch on the frontal panel it is possible to select between different operating modes:

COLLEGAMENTI ELETTRICI

Tramite il selettore rotativo sul pannello frontale è possibile scegliere tra diverse modalità di funzionamento:

BRANCHEMENTS ELECTRIQUES

Au moyen du commutateur rotatif sur le panneau frontal, il est possible de choisir entre différents modes de fonctionnement:

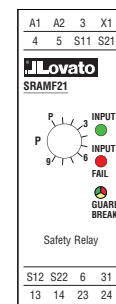
ELEKTRISCHE ANSCHLÜSSE

Über den Drehschalter auf der Frontplatte kann zwischen verschiedenen Betriebsarten gewählt werden:

CONEXIONES ELÉCTRICAS

Por medio del conmutador rotativo en el panel frontal es posible seleccionar entre diferentes modos de funcionamiento:

| ROTARY SWITCH POSITION | OPERATING MODE SELECTED | OPERATING MODE DESCRIPTION |
|------------------------|-------------------------|------------------------------------------------------------------------------|
| P | Programming | Programming mode start |
| 1 | 1A | OSSD double input, automatic restart mode |
| 2 | 1C | OSSD double input, monitored restart mode |
| 3 | 2A | Gate monitoring/Emergency stop function, automatic restart mode |
| 4 | 2M | Gate monitoring/Emergency stop function, manual restart mode (not monitored) |
| 5 | 2C | Gate monitoring/Emergency stop function, monitored restart mode |
| 6 | 3A | Two-hands control, automatic restart mode |
| 7 | 3C | Two-hands control, automatic restart mode, changeover contact |
| 8 | 4A | Type 2 photocells control, automatic restart mode |
| 9 | 4C | Type 2 photocells control, monitored restart mode |



PROGRAMMING

PROGRAMMAZIONE

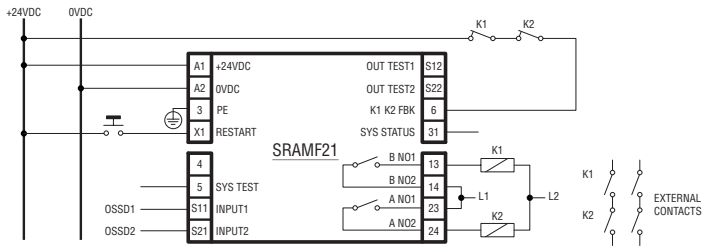
PROGRAMMER

PROGRAMMIERUNG

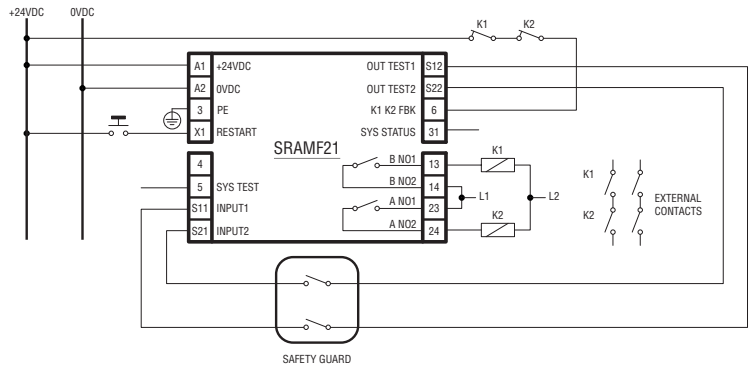
PROGRAMACIÓN

| STEP | OPERATION |
|------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 1 | Set the rotary switch to configuration position P. Posizionare il commutatore rotante nella posizione di configurazione P. Placez le commutateur rotatif en position de configuration P. Stellen Sie den Drehschalter auf die Konfigurationsposition P. Ajustar el interruptor giratorio a la posición de configuración P. |
| 2 | Switch on the power supply of the device. The led INPUT 1 is flashing green (the device is waiting the programming). Attivare l'alimentazione dell'apparecchio. Il led INPUT 1 lampeggia in verde (il dispositivo è in attesa della programmazione). Activer l'alimentation électrique de l'appareil. La led INPUT 1 clignote en vert (l'appareil attend la programmation). Schalten Sie die Stromversorgung des Geräts ein. Die LED INPUT 1 blinkt grün (das Gerät wartet auf die Programmierung). Encienda la alimentación del dispositivo. El led INPUT 1 está parpadeando en verde (el dispositivo está esperando la programación). |
| 3 | Adjust the rotary switch to the needed position (refer to Technical Manual). During the rotation the led INPUT 2/FAIL lapse green by every step. Posizionare il commutatore rotante nella posizione desiderata (consultare il Manuale Tecnico). Durante la rotazione il led INPUT 2/FAIL lampeggia in verde ad ogni passo. Ajustez le commutateur rotatif dans la position requise (voir le manuel technique). Pendant la rotation, le led INPUT 2/FAIL clignote en vert à chaque pas. Stellen Sie den Drehschalter auf die gewünschte Position ein (siehe Technisches Handbuch). Während der Drehung leuchtet die INPUT 2/FAIL bei jedem Schritt grün. Ajuste el interruptor giratorio a la posición necesaria (consulte el manual técnico). Durante la rotación, el led INPUT 2/FAIL se pone verde en cada paso. |
| 4 | Wait 5 seconds until led INPUT 1 flashes three times (memorization) and remains on. Attendere 5 secondi fino a quando il led INPUT 1 lampeggia tre volte (memorizzazione) e rimane acceso. Attendez 5 secondes que le voyant INPUT 1 clignote trois fois (mémorisation) et reste allumé. Warten Sie 5 Sekunden, bis die LED INPUT 1 dreimal blinkt (Speicherung) und eingeschaltet bleibt. Espere 5 segundos hasta que el led INPUT 1 parpadee tres veces (memorización) y permanezca encendido. |
| 5 | Turn OFF the power (the device is now ready to work). Spegner l'alimentazione (l'apparecchio è ora pronto a funzionare). Éteignez l'appareil (l'appareil est maintenant prêt à fonctionner). Schalten Sie die Stromversorgung aus (das Gerät ist jetzt betriebsbereit). Aparar la energía (el dispositivo está listo para funcionar). |

Operating Modes 1A, 1C – Manual mode with EDM

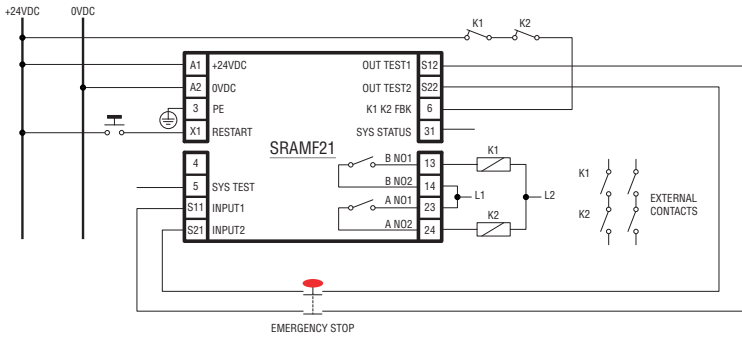


Operating Modes 2A, 2M, 2C – Manual mode with EDM (safety guard)



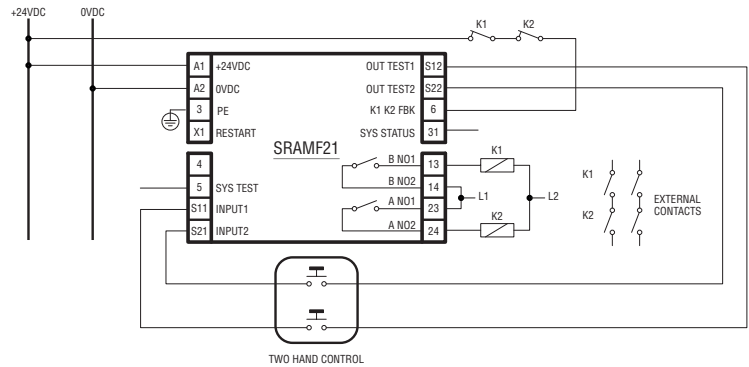
(Mode 2M) When pin X1 is permanently connected to 24VDC the module works in Automatic Restart mode

Operating Modes 2A, 2M, 2C – Manual mode with EDM (emergency stop actuators)

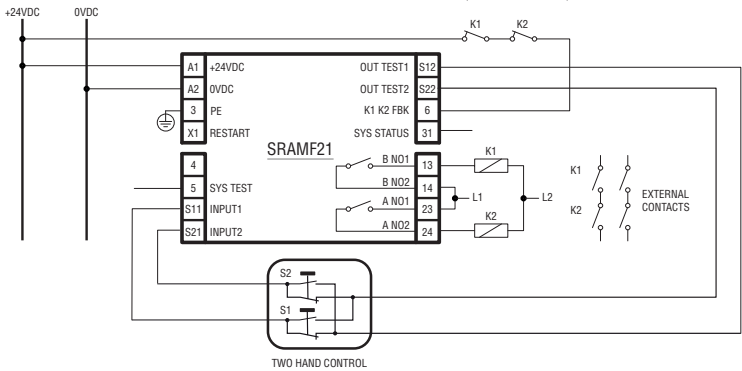


(Mode 2M) When pin X1 is permanently connected to 24VDC the module works in Automatic Restart mode

Operating Modes 3A – Automatic mode with EDM (two-hand control)



Operating Modes 3C – Automatic mode with EDM (two-hand control)



Operating Modes 4A, 4C – Manual mode with EDM (type 2 photocells)

