

PRODUCT GUIDE





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| www.srs-group.com sales@srs-group.com phone: +421 2 4468 1417 fax: +421 2 4468 1419 The value of experience can be understood only when it is gained. It influences people, their decisions, it opens doors to new solutions and gives the ability to make something new and progressive.

Robert Sloboda

## **GLOSSARY**



#### AUTOMATIC PHASE ALIGN

This feature automatically detects the rotation of phases on mains. In case of inversion, the motor controller aligns the phases automatically to provide safe UP/DOWN operation.



#### MANUAL PHASE ALIGN

Devices containing this feature are equipped with an input reversible connector that allows its user manually swap the align of phases without any tools.



#### SIL3 E-STOP

Certified built-in safety relays guarantee safe E-STOP functionality under all conditions. Unit with this technology conforms to the latest requests of safety defined by the Machinery Directive.



#### AHD DIGITAL LINK

AHD Advanced Digital linking of several devices together makes their GO and E-STOP buttons work at the same time on all units in chain.



#### GROUP CONTROL TECHNOLOGY

Group Control Technology offers simple control of multiple channels via single switch of the CMG remote. The control behavior can be programmed using the USB programmer.



#### **RCBO**

RCBO is a combination of RCD life protection device that is usually 30mA and the MCB magnetic circuit breaker in a single device.



## SRS 2-YEAR WARRANTY

Under our 2-year warranty, we guarantee repairs or replacements of our product without any fees, in the shortest time possible.



#### CE CERTIFIED

All SRS products are CE certified and safe to use according the safety, machinery or low voltage directives.



#### SRS CUSTOMIZATION®

We can offer you hardware or software customization of the product. There is also the option to create a brand new device according to your needs.



## SRS WORLDWIDE USAGE®

Devices created for worldwide usage, equipped with the fullrange power supply.



#### GROUP STOP

GST unit is equipped with the GROUP STOP functionality. This means that if any of the hoist protection devices like MCB or Motor Starter is activated by an overload, the controller stops its operation and requires an action.



#### LINKABLE VIA DIGITAL LINE

Digital linking of several devices together makes their GO and E-STOP buttons work at the same time on all units in chain. Digital link offers additional functionalities like transfer of various command messages across linked network.



#### LINKABLE VIA ANALOG LINE

Linking several devices together via analog line makes their GO and E-STOP buttons work at the same time on all units in chain.



#### MOTOR STARTER

This optional feature can be fit into most controllers. Several legal authorities require the MOTOR STARTER instead of common circuit breakers as the protection of hoist/motor.



#### SW UPDATE

Software update is a feature that uses a USB to RS485 cable for the software update. Using the SW-UPG cable, devices that are not equipped with a USB port can be connected to the computer. (Some restriction may apply!)

## CONTENT

WMC SERIES

RMC SERIES



DIRECT VOLTAGE CONTROLLERS









LOW VOLTAGE CONTROLLERS







TOURING SYSTEMS

TOURING RIGGING SYSTEMS

LOAD MONITORING

SIMPLE CONTROLLERS

RIGGING ACCESSORIES



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## WMC SERIES

- WMCseries unit is a unique device developed as a replacement for the actual cable hoist controllers. WMCseries makes work with your hoists easier, faster and safer. This device allows riggers to control direction of one hoist or the complete hoist system from the local control or via a remote unit. The key switch allows secure operation and prevents usage by unauthorized persons.
- WMCseries is produced with 8 and 12 channels for both direct and low voltage control.



#### WMC8 / WMC12 BASE UNIT

- 8 / 12 switches with LED indication
- Green illuminated GO button
- Emergency STOP button
- Modes key-switch
- Docking station + battery charger
- Signal quality bargraph
- Status & charger indicators
- Link connectors
- For a use with Direct and Low Voltage Controllers





















- Motorola Li-Ion battery
- 8-hours standby time

## RMC SERIES

- RMCseries hoist controller serves as a replacement for CMCseries cable controllers with dry contacts. With this small add—on you can make your motor controller linkable, controlled by a digital remote or E—STOP operated via load—cell readout.
- This device allows riggers to control direction and timing of movement of one hoist or the complete hoist system. They can use digital cable remote controller or local control switches.



#### RMC8 / RMC12 BASE UNIT

- Hoist controller base unit receiver
- Local or digital operation
- 8 / 12-channel switches with UP/STAY/DOWN function
- 8 / 12-channel output dry contacts for hoist
- Controller and E-STOP
- Function key switch with OFF/LOCAL/REMOTE control modes
- LOCAL GO and Emergency STOP button
- IEC60204: SIL3
- 3U, 19" rack-mount
- Compatible with GMCseries for a use with Direct and Low Voltage Controllers

#### CMC DIGI

- Cable remote DIGITAL controller
- Controls up to 60 channels
- High-quality switches with covers against dust and water
- LED signalization of POWER/STATUS
- LED signalization of GO button and Direction positions
- 5-pin Neutrik connector
- Robust stackable lightweight aluminum case























## AHD-DV

#### **AHD8 / AHD12 / AHD24**

- Controls up to 24 hoists
- RCD 30mA and MCB 10A/16A protection of outputs
- Automatic phase sequence check and align
- Automatic voltage check and hoist protection
- Group channel control via CMG remote
- Remote RESET function
- Key switch
- Hoist types: BGV D8, BGV D8+
- Link connector for control of up to 384 hoists
- 2x AUX connector
- 2x Limit STOP connector
- Emergency STOP circuit according to: IEC60204, SIL3

- Advanced Digital Hoist Controller was designed to control up to 24 electrically compatible motors, either separately or simultaneously controlled via CMCseries Digital Cable Remote Controller.
- The device is equipped with unique Automatic Phase Align module, which guarantees that the motors are still moving in the same direction on any align of input phases. If any line wire is disconnected, the hoist controller stops to ensure safe operation. Another feature of AHD is the Automatic Voltage Metering module. This module checks main voltage for AC 400V +-20%, star configuration and protects the hoists in case of problem with main voltage.





- IEC60309 CEE form
- Socapex® 19-pin

**INPUTS** 

- Harting® 16-pin
- Harting® 24-pin
- Powerlock
- Screw terminal

#### PROTECTION

- Main switch, optional RCD
- Optional Hydromagnetic breakers

#### OUTPUTS

- IEC60309 CEE form
- Harting® 6-pin
- Harting® 16-pin
- Harting® 24-pin
- Socapex® 7-pin
- Socapex® 19-pin
- Screw terminal



















## GMC-DV

#### GMC8 / GMC12

- Controls up to 12 hoists
- MCB16A and RCD 30mA protection of outputs
- Automatic phases sequence check and align
- Automatic voltage check and hoist protection
- Group-stop function
- Key switch
- Hoist type: BGV D8, BGV D8+
- Link connector
- 2x AUX connector
- 2x E-STOP connector



- GMCseries is produced with 4, 8 and 12 channels for the direct voltage control. All units have fully automatic phase reversing in any connection of the input phases the UP/DOWN directions always watch the actual direction. This guarantees safe operation.
- All controllers may be linked to form larger system movement of a pre-selected group. All controllers are ISO 13849-1, EN/EC 62061 compliant.





#### **INPUTS**

- IEC60309 CEE form
- Socapex® 19-pin
- Harting® 16-pin
- Harting® 24-pin
- Powerlock

















#### **PROTECTION**

- Main switch, optional RCD
- Optional Hydromagnetic breakers

#### OUTPUTS

- IEC60309 CEE form
- Harting® 6-pin
- Harting® 16-pin
- Harting® 24-pin
- Socapex® 7-pin
- Socapex® 19-pin

## MCBC-DV

MCBCseries units are direct voltage hoist controllers that serve as standalone devices. The control of the hoists is done using tri-directional switches and a GO button. Manual phase align makes MCBC flexible to use with most types of hoists.

#### MCBC4 / MCBC8 / MCBC12

- Controls up to 12 direct voltage hoists
- Automatic voltage check and hoist protection
- Phase align 123/132 indication
- Hoist types: BGV D8, BGV D8+
- Link of GO / STOP buttons possible
- Emergency STOP
- Size: 9U, 6U, 3U (MCBC12, 8, 4 respectively)







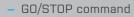


#### OUTPUTS

- IEC60309 CEE form
- Harting® 6-pin
- Harting® 16-pin
- Harting® 24-pin
- Socapex® 7-pin - Socapex® 19-pin
- Screw terminal

#### MCBCX.MCP REMOTE

- Remote for MCBCseries controllers























MCPseries unit is a portable and handy motor controller housed in a durable plastic box. It is perfect for riggers that require easeof-control and flexibility. MCP controller comes in a four and eight channel version. High-quality switches and connectors provide trouble-free operation.

#### MCP4

- 4-channel direct voltage motor controller
- MCB16A and RCD 30mA protection of outputs
- Manual phase align via power input connector
- Hoist type: BGV D8, BGV D8+
- Link connector



#### MCP8

- 8-channel direct voltage motor controller
- MCB16A and RCD 30mA protection of outputs
- Manual phase align via power input connector
- Hoist type: BGV D8, BGV D8+
- Link connector











- CEE16 / 4p
- CEE16 / 4p + Harting 16-pin
- CEE16 / 4p + Socapex 19-pin







## AHD-LV

#### AHD8 / AHD12 / AHD24

- Controls up to 24 hoists
- RCD 30mA and MCB 10A/16A protection of outputs
- Automatic phase sequence check and align
- Automatic voltage check and hoist protection
- Group channel control via CMG remote
- Remote RESET function
- Key switch
- Hoist types: BGV D8, BGV D8+
- Link connector for control of up to 384 hoists
- 2x AUX connector
- 2x Limit STOP connector
- Emergency STOP circuit according to: IEC60204, SIL3
- MOTOR 1-2 MOTOR 19-21 MOTOR 19-21 MOTOR 22-24

  ALIX MAIN MOTOR 13-35 MOTOR 18-21 MOTOR 18-2

- Advanced Digital Hoist Controller was designed to control up to 24 electrically compatible motors, either separately or simultaneously controlled via CMCseries Digital Cable Remote Controller.
- The device is equipped with unique Automatic Phase Align module, which guarantees that the motors are still moving in the same direction on any align of input phases. If any line wire is disconnected, the hoist controller stops to ensure safe operation. Another feature of AHD is the Automatic Voltage Metering module. This module checks main voltage for AC 400V +-20%, star configuration and protects the hoists in case of problem with main voltage.



#### **INPUTS**

- IEC60309 CEE form
- Socapex® 19-pin
- Harting® 16-pin
- Harting® 24-pin
- Powerlock
- Screw terminal

#### PROTECTION

- Main switch, optional RCD
- Optional Hydromagnetic breakers

#### OUTPUTS

- IEC60309 CEE form
- Harting® 6-pin
- Harting® 16-pin
- Harting® 24-pin
- Socapex® 7-pin
- Socapex® 19-pin
- Screw terminal

















## GMC-LV

#### GMC8 / GMC12

- Controls up to 12 hoists
- MCB16A and RCD 30mA protection of outputs
- Automatic phases sequence check and align
- Automatic voltage check and hoist protection
- Group-stop function
- Key switch
- Hoist type: BGV D8, BGV D8+
- Link connector
- 2x AUX connector
- 2x E-STOP connector

- GMCseries is produced with 4, 8 and 12 channels for the low voltage control. All units have fully automatic phase reversing in any connection of the input phases the UP/DOWN directions always watch the actual direction. This guarantees safe operation.
- All controllers may be linked to form larger system movement of a pre-selected group. All controllers are ISO 13849-1, EN/EC 62061 compliant.



#### **INPUTS**

- IEC60309 CEE form
- Socapex® 19-pin
- Harting® 16-pin
- Harting® 24-pin
- Powerlock



















#### **PROTECTION**

- Main switch, optional RCD
- Optional Hydromagnetic breakers

#### OUTPUTS

- IEC60309 CEE form
- Harting® 6-pin
- Harting® 16-pin
- Harting® 24-pin
- Socapex® 7-pin
- Socapex® 19-pin

## MCBC-LV

MCBCseries units are low voltage hoist controllers that serve as standalone devices. The control of the hoists is done using tri-directional switches and a GO button. Manual phase align makes MCBC flexible to use with most types of hoists.

#### MCBC4 / MCBC8 / MCBC12

- Controls up to 12 direct voltage hoists
- Automatic voltage check and hoist protection
- Phase align 123/132 indication
- Hoist types: BGV D8, BGV D8+
- Link of GO / STOP buttons possible
- Emergency STOP
- Size: 9U, 6U, 3U(MCBC12, 8, 4 respectively)



#### OUTPUTS

- IEC60309 CEE form
- Harting® 6-pin
- Harting® 16-pin
- Harting® 24-pin
- Socapex® 7-pin
- Socapex® 19-pin
- Screw terminal

















#### MCBCX.MCP REMOTE

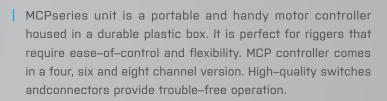
- Remote for MCBCseries controllers
- GO/STOP command
- 4-pin link/remote connector



## MCP-LV

### MCP4 / MCP6 / MCP8

- Controls up to 8 low voltage hoists
- MCB16A and RCD 30mA protection of outputs
- Optional MOTOR STARTERS
- Manual Phase Align (MPA)
   using power input connector
- Hoist types: BGV D8, BGV D8+
- Link connector













- CEE16/4p YELLOW male
- Harting 6-pin
- Socapex 19-pin







## TOURING RIGGING SYSTEM

THE COMPLETE SYSTEM CONSISTS OF THE FOLLOWING UNITS:

- Touring Rigging Systems are designed as a modular system to provide an affordable and plug-and-play solution for touring rigging. Systems can control from 8 up to 128 channels of motors. System can be equipped with Direct Control or Low Voltage controller in combination with a load-cell readout unit for monitoring the load of structures.
- Multi-pin split boxes are integrated in covers of rigging system. This makes them easily accessible and safely stored during transport. All TRS devices can be later upgraded with a load-cell readout including the emergency stop (E-STOP) function.

Drawer for additional

storage place



WMC - wireless / local controller see on p.6



RMC – digital / local controller see on p.7

GMC SIL3 – power box see on p.9 and p.13

#### MC SPLITBOX

 MC-SPLIT breakout boxes (installed in covers)

see on p.22





- 8/12-channel hoist controller
- SIL3 emergency stop
- Each hoist has a separate protection MCB
- RCD/GFI on main input
- AUX output
- Under-voltage & over-voltage protection
- Protection against missing phase
- Input: AC 3x230V/400V, 50-60Hz
- Output: depending on the GMC model
- Device configuration fully scalable
- Optional load-cell readout
- External SIL3 Emergency stop available
- IEC60204: SIL3
- For a use with Direct and Low Voltage Controllers

#### **INPUTS**

- IEC60309 CEE form
- Socapex® 19-pin
- Harting® 16-pin
- Harting® 24-pin
- Powerlock

#### OUTPUTS

- IEC60309 CEE form
- Harting® 6-pin
- Harting® 16-pin
- Harting® 24-pin
- Socapex® 7-pin
- Socapex® 19-pin

#### PROTECTION

- Main switch, optional RCD
- Optional Hydromagnetic breakers



## LOAD MONITORING

THE LOAD MONITORING SYSTEM CONSISTS OF THE FOLLOWING PARTS: When it comes to rigging, increased safety is required, and simplicity of work is needed. Therefore, SRS Rigging has implemented a system that monitors loads on its hoists that prevents from unequal load distribution among them. When the load on either of the hoists is greater than the rest, the Load Monitoring System triggers an action to either stop the complete system or warn its user about this fact.

#### **NLP**

- Up to 24 inputs for 4-20mA load-cells
- Truss / wall / rack-mount
- TFT full color display
- Easy control using encoder and 2 buttons
- Ethernet connection to computer
- Power via PowerCon for easy daisy-chain connection
- Easy use of any 5-pin DMX or audio cable
- LED indication of link, limits and status

- 2x E-STOP safety output for limit and warning
- 2x RS485 line to connect to GMCseries or other systems
- Supports various brands
- Free software support/updates

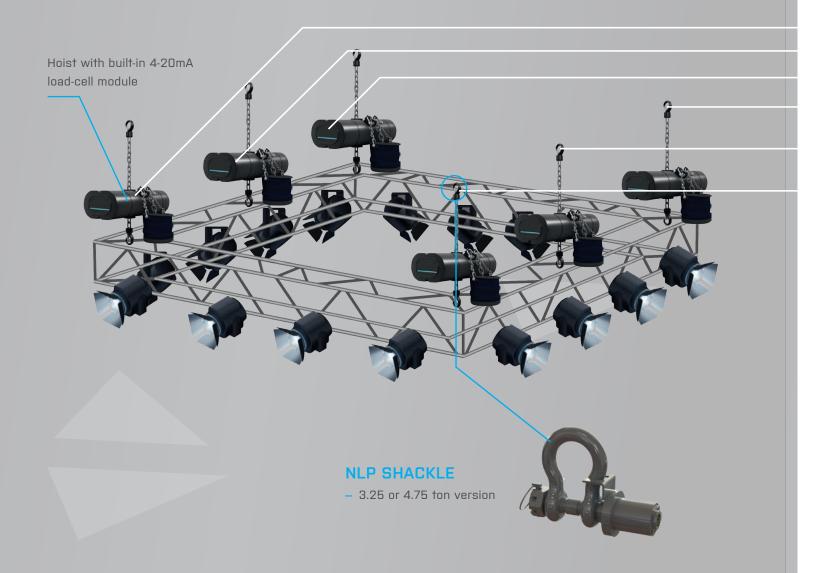












#### MAC/PC SOFTWARE SUITE

- Easy monitoring of loads
- Editable channel names and groups
- Limits and warnings differentiated by color
- Available for download
- Not necessary to run the system

#### **TOURING RIGGING SYSTEM**

- Receives E-STOP commands from NLP







#### **NLP CABLES**

- Identical to regular 5-pin DMX cables
- Come in different lengths





# SIMPLE CONTROLLERS

- The MCPH and PMC devices were designed for simple control of up to two direct voltage hoists. They are both equipped with the Manual Phase Align (MPA) module that allows swapping between phases easily by rotating pins L2 and L3 on the main connector. Their durable components are housed in a bulletproof body that ensure long-lasting operation.
- The MCPH motor controller was designed to control up to two electrically compatible motors separately or simultaneously using the switches located on the yellow body of the controller.



- Controls up to 2 low voltage hoists
- Manual Phase Align using power input connector
- Hoist types: BGV D8, BGV D8+
- Hoist connection: CEE16/4p RED female for power,
   CEE16/4p YELLOW male for control





The CMCseries controller allows controlling of the GMCseries device via cable connection. Standard length of cable is 10m. Longer cables are possible on request. There are also CMC-EC as a cable extension with various lengths and CMC-EB box available for extension of cable for special purposes.

#### CMC4 / CMC8 / CMC12

- Cable remote controller for GMCseries controllers
- Controls up to 12 channels
- High-quality switches with covers against dust and water
- LED signalization of GO button and directions
- Military grade Amphenol control connectorRobust stack-able lightweight aluminum case





## PMC1 / PMC2 DIRECT VOLTAGE CONTROLLER

- Wall-mount
- Controls up to 2 direct voltage hoists
- MCB16A and RCD 30mA protection of outputs
- Manual Phase Align using power input connector
- Hoist types: BGV D8, BGV D8+
- Hoist connection: CEE16/4p

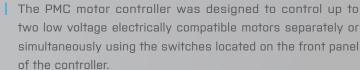












#### PMC1 / PMC2 LOW VOLTAGE CONTROLLER

- Wall-mount
- Controls up to 2 low voltage hoists
- MCB16A and RCD 30mA protection of outputs
- Manual Phase Align using power input connector
- Hoist types: BGV D8, BGV D8+
- Hoist connection: CEE16/4p RED female for power, CEE16/4p YELLOW male for control











## RIGGING **ACCESSORIES**



#### **MC-SPLIT**

- The MC-SPLIT breakout split box is a great tool for the connection of hoist to the controller through multi-pin cables. Its robust construction with metal parts with powder coating makes is durable and reliable accessory for every rigging job. Variable wiring is available on request without additional charge.
  - Breakout split box for hoist controller
  - Input: Socapex 19, Harting 16 or 24
  - Output: CEE16/4 (CEE16/5 on request)
  - LV Output: CEE16/4p YELLOW female
  - High quality sockets
  - M10 thread for C-clamp
  - Safety wire connection





#### PC WMC-RMC PWR

PC WMC/RMC PWR is a set of two cables used for — Cables for interconnection interconnection of WMC or RMC with GMC units.



- of WMC/RMC and GMC
- NAC3FCB to NAC3FCA
- NC4MXX to NC4MXX
- 50cm cable
- Plug-and-play



#### **SW-UPG**

The software upgrade is done using the DMX — For firmware upgrade and connector on one side and the USB connector on the other side of the cable.









- software functions control
- Compatible with most of SRS Group products
- USB to DMX 1.5m cable
- 3-pin, 5-pin or 7-pin DMX connector



## PRODUCT FEATURES

	AHD DIGITAL LINK	DIGITAL LINK	OUTPUT
WMC	4	4	DRY CONTACT
WMC-DIGI	4	4	DIGITAL
RMC	4	4	DRY CONTACT+DIGITAL
CMC-DIGI	≥₹	4	DIGITAL
СМС	<b>4</b>	4	DRY CONTACT

	AUTO	MANUAL	ŮV/Hz AVM	STOP	G1 M1+M2 GCT	AHD LINK	DIGITAL LINK	tol (
	APA	МРА	AVM	GROUP STOP	GROUP CONTROL	AHD DIGITAL LINK	DIGITAL LINK	MOTOR STARTER
AHD-DV	25		AS .	4	<b>A</b>	25		OPTIONAL
AHD-LV	4		AS .	45	4	4		OPTIONAL
AHD-WLV	4		4	45	<b>4</b>	4		OPTIONAL
GMC-DV	<b>4</b>		4	45			<b>A</b>	OPTIONAL
GMC-LV	<b>₫</b>		<b>4</b>	45			<b>A</b>	OPTIONAL
GMC-WLV	<b>4</b>		4	45			<b>4</b>	OPTIONAL
MCBC-DV		<b>4</b>	4	<b>45</b>				
MCBC-LV		<b>4</b>	4	45				
MCPH-DV		<b>4</b>						4
MCPH-LV		<b>4</b>						
MCP-LV		<b>4</b>						OPTIONAL
MCP-DV		<b>4</b>						OPTIONAL
PMC-LV		4						OPTIONAL
PMC-DV		24						OPTIONAL

