



## Standard integrated command and control panels MSA2 for monitors A2 type

Monitors A2 type, as described in their technical features, are equipped with an innovative system of sensors and actuators allowing command and control of all their functions by means of one single cable, through which also electric power supply is provided.

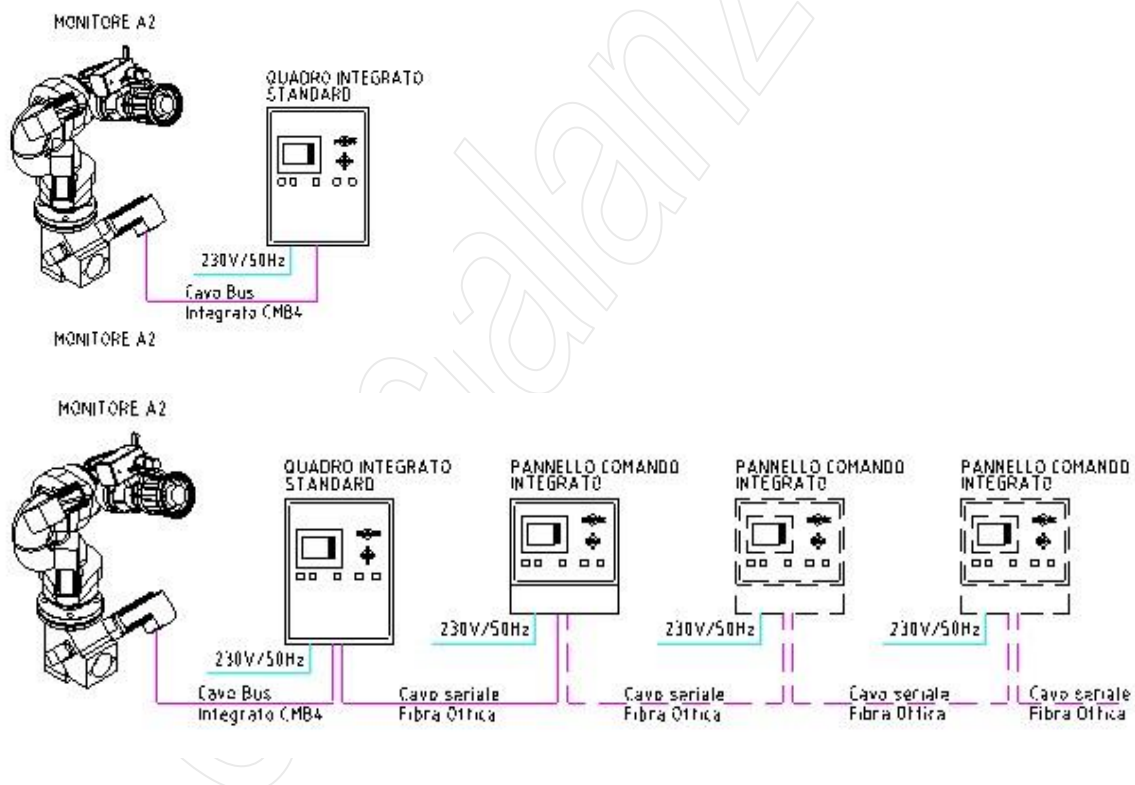
Therefore monitors have to be connected to the special standard integrated panels Caccialanza MSA2 type and cannot be directly connected to any other panel or power supply.

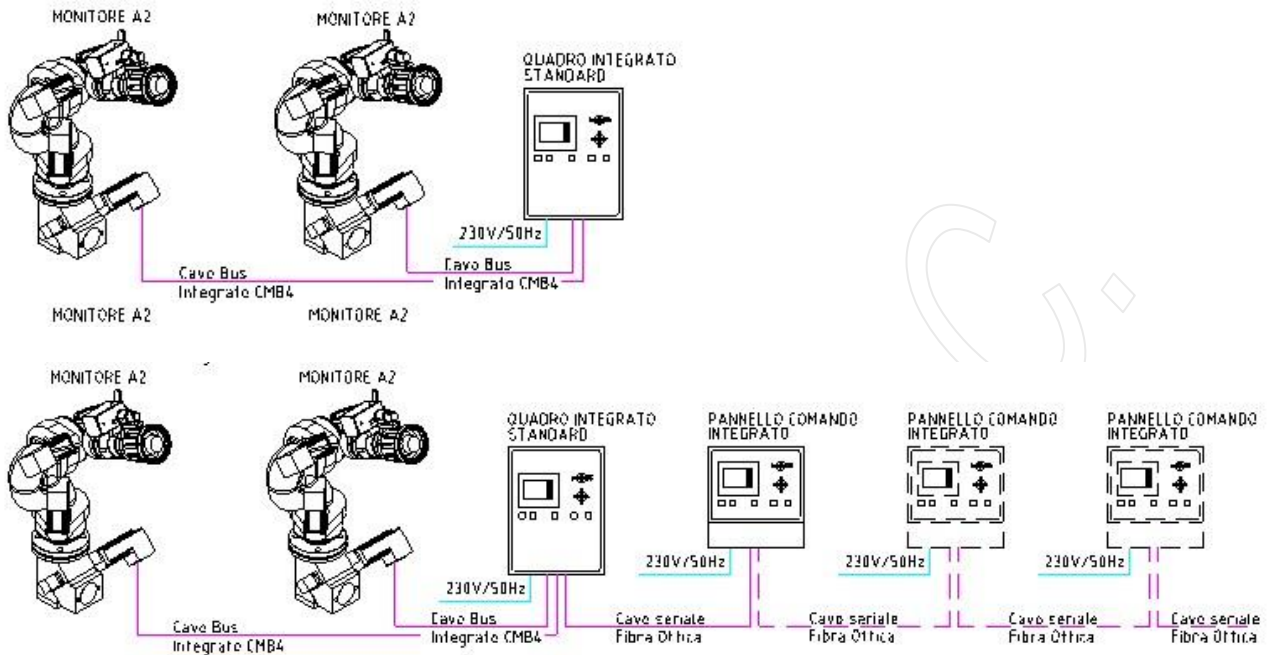
MSA2 panels are provided with interfaces with industrial standard, direct contacts / serial type, allowing therefore bidirectional interface with any external command and control unit required by the client.

MSA2 panels are supplied for connection of 1 or 2 A2 monitors, eventually equipped also with a section valve.

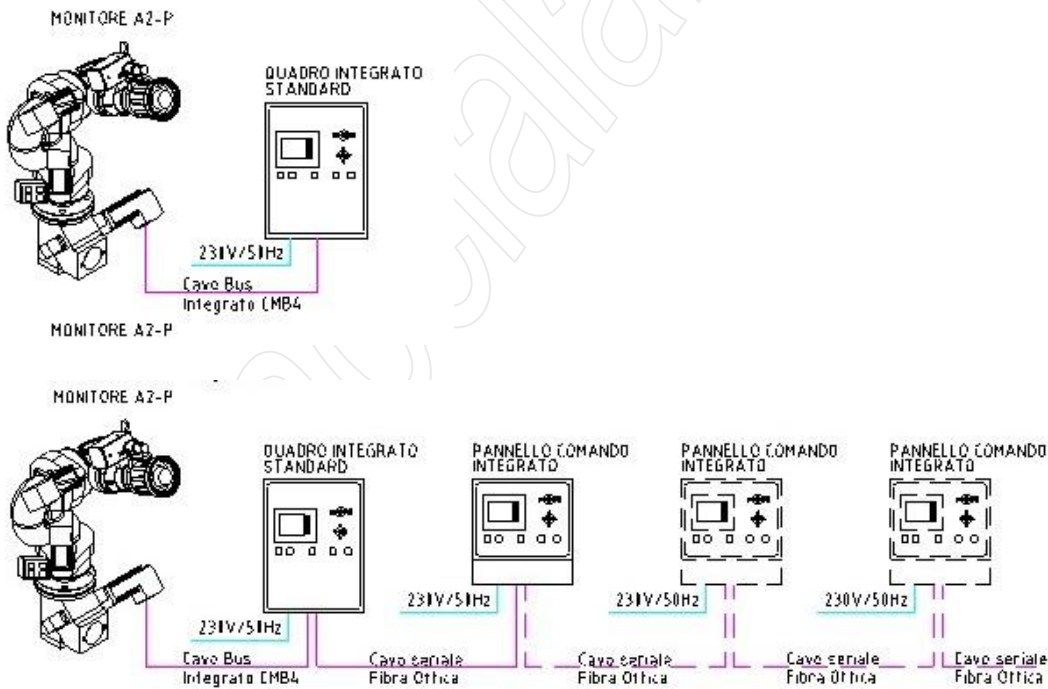
In large plants more panels can be grouped together in synoptic and self standing command panels.

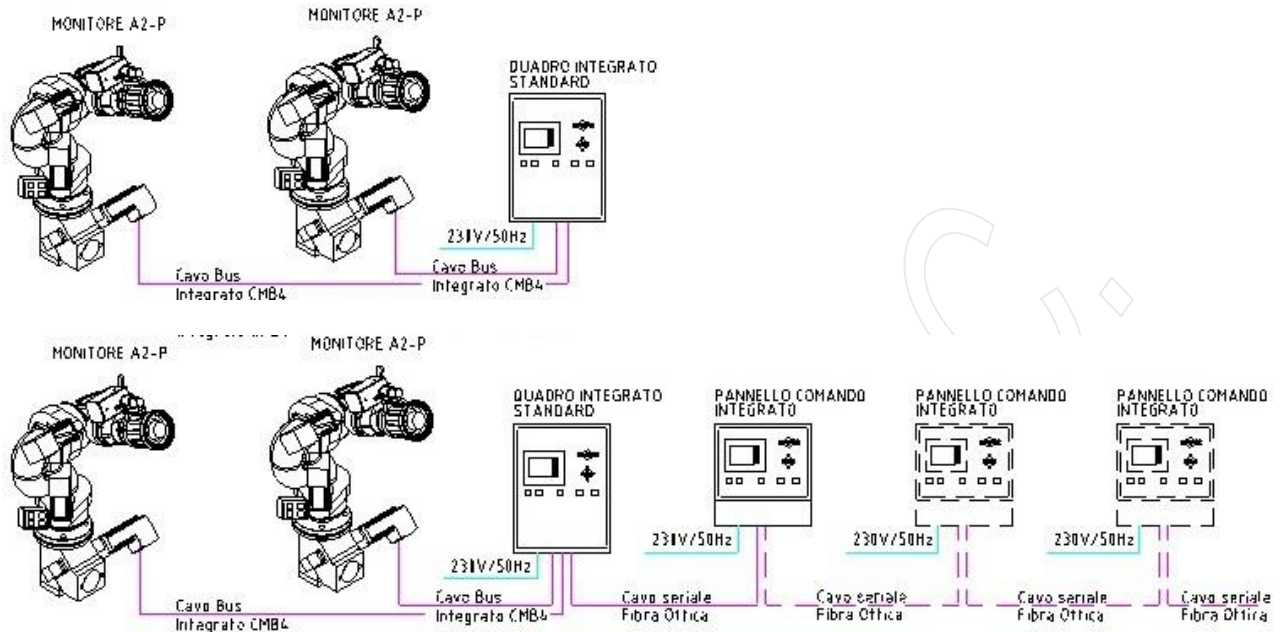
The following pictures show the typical possible connections of the units, for 1 single monitors or 2 monitors.





A2 monitors can be supplied also in -P execution, i.e. equipped with pushbuttons mounted directly on the monitor for local command.

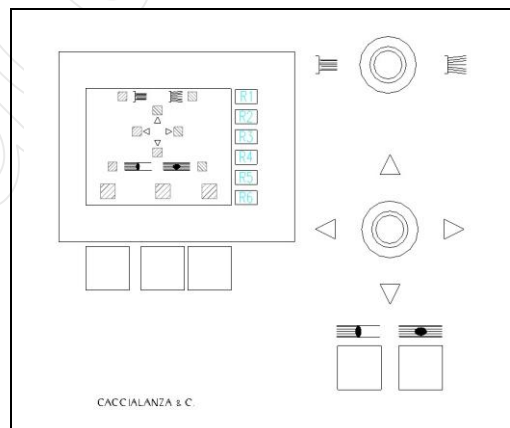




In conclusion, command of A2 monitors is possible, for all their functions of elevation, rotation, nozzle and valve,

- from the command and control panel,
- from eventual additional command panels (up to 5 max.),
- from eventual local pushbuttons on the monitor (for -P execution),
- from an eventual synoptic panel (for larger plants) able to command all the monitors of the plant,
- from external commands through contact without voltage,
- from external commands through serial interface, in particular RS485 or RS232 type.

For each function the main panel foresees, in addition to actuators (joysticks and pushbuttons), also control lamps (by means of LEDs or phantomized on LCD display) signaling the end positions or movements in progress, besides eventual faults for each movement, as shown in the annexed drawing.





In the standard IP54 execution the main components of the system are the following:

Standard Panels IP54						
Type	Code	Number of Cabinets	Voltage *	# of controlled movements	Weight (Kg)	Notes
MSA2 / QSP1AC	4640701110	2	230V/50Hz	2	23+20	
MSA2 / QSP2AC	4640701210	2	230V/50Hz	3	24+20	
MSA2 / QSP1DC	4640701120	2	24V C.C.z	4	25+20	
MSA2 / QSP2DC	4640701220	2	24V C.C.z	4	25+20	
MSA2 / QSR1AC	4640702110	1	230V/50Hz	20	300	
MSA2 / QSR2AC	4640702210	1	230V/50Hz	n.a.	50	
MSA2 / QSR1DC	4640702120	1	24V C.C.	n.a.	5+20	
MSA2 / QSR2DC	4640702220	1	24V C.C.	n.a.	310	

\* different voltages, frequencies and 3 Ph executions available on request.

In the following table all technical drawings referred to each model of standard panel are listed and can be directly opened:

Standard Panels IP54 – Technical drawings cross reference				
Type	Code	Electric Panel Diagram #	Interconnection dwg #	Notes
MSA2 / QSP1AC	4640701110	46401031	46401021 – 46401022	
MSA2 / QSP2AC	4640701210	46401031	46401021 – 46401022	
MSA2 / QSP1DC	4640701120	46401032	46401021 – 46401022	
MSA2 / QSP2DC	4640701220	46401032	46401021 – 46401022	
MSA2 / QSR1AC	4640702110	46401041	46401021 – 46401022	
MSA2 / QSR2AC	4640702210	46401041	46401021 – 46401022	
MSA2 / QSR1DC	4640702120	46401042	46401021 – 46401022	
MSA2 / QSR2DC	4640702220	46401042	46401021 – 46401022	