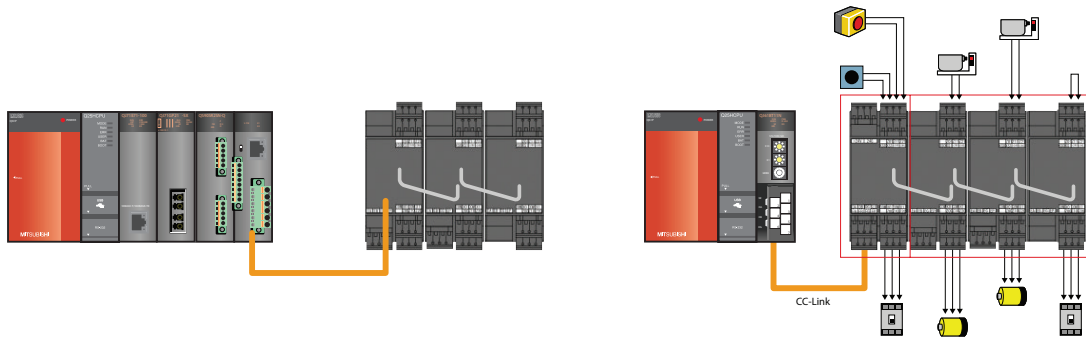


Safety Relay Modules



Function	Description
Dual Input Function	Prevents damage of the safety functions due to a single failure by doubling inputs. Input N type: Dual input with positive common and negative common Input P type: Dual input with positive commons In the case of input N type, when a short circuit occurs between the dual inputs, a short circuit occurs between the power supply and grounding. Therefore, power goes off by the electric fuse.
Start-Up/Off Check Function	Checks that status of the safety relay module and external device are normal.
Start-Up Method Selection Function	Checks that status of the safety relay module and external device are normal.
Monitor Function	Allows to check operating status of the whole safety relay modules including extension safety relay modules by connecting to the programmable controller using programming tool.
Partial Shutdown Function With Extension Module	Allows to shut off outputs of a certain module by using safety inputs of extension module.

Safety Relay Module Specifications

Model Number	Q Series Safety Relay Module		CC-Link Safety Relay Module		Extension Safety Relay Module	
	QS90SR2SP-Q	QS90SR2SN-Q	QS90SR2SP-CC	QS90SR2SN-CC	QS90SR2SP-EX	QS90SR2SN-EX
Stocked Item	S	S	S	S	S	S
Applicable Safety Standard	EN954-1 Category 4, ISO13849-1 PL _e					
Number of Safety Input Points	1 point (2 inputs)					
Number of Start-Up Input Points	1 point					
Number of Safety Output Points	1 point (3 outputs)					
Rated Load Current	Category 4: 3.6 A/point or less, Category 3: 5.0 A/point or less (250VAC/30VDC)					
Response Time	Time Until Output OFF	20 ms or less (safety input OFF to safety output OFF)				
	Time Until Output ON	50 ms or less (safety input ON to safety output ON)				
Module Power Supply	20.4 to 26.4VDC (ripple ratio: 5% or less)		20.4 to 26.4VDC (ripple ratio: 5% or less)		Supplied from Q Series safety relay module or CC-Link safety relay module.	
Safety Power Supply	20.4 to 26.4VDC (ripple ratio: 5% or less)		20.4 to 26.4VDC (ripple ratio: 5% or less)		Supplied from Q Series safety relay module or CC-Link safety relay module.	
Number of Extension Modules	Max. 3 extension safety relay modules		Max. 3 extension safety relay modules		N/A	
External Connections	Two-piece spring clamp terminal block					
Relay Life	Mechanical	5,000,000 times or more				
	Electrical	100,000 times or more				
Input Type	P type (dual input with positive commons)	N type (dual input with positive common and negative common)	P type (dual input with positive commons)	N type (dual input with positive common and negative common)	P type (dual input with positive commons)	N type (dual input with positive common and negative common)

Safety Relay Module Extension Cables

Model Number	QS90CBL-SE01	QS90CBL-SE15
Stocked Item	S	S
Cable Length (m)	0.1	1.5