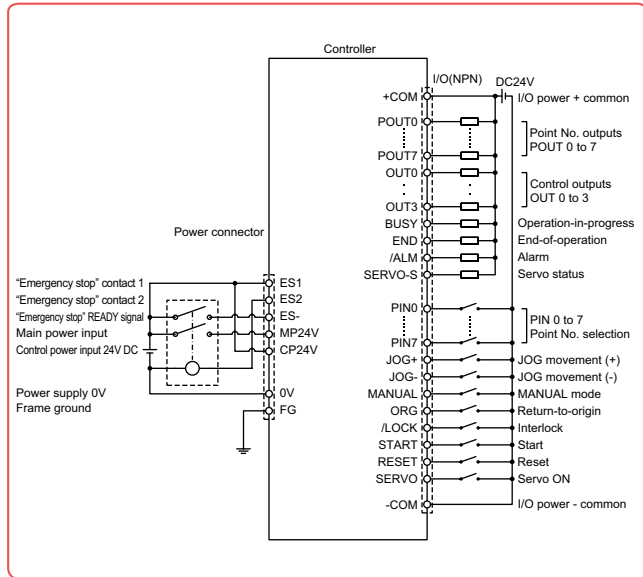


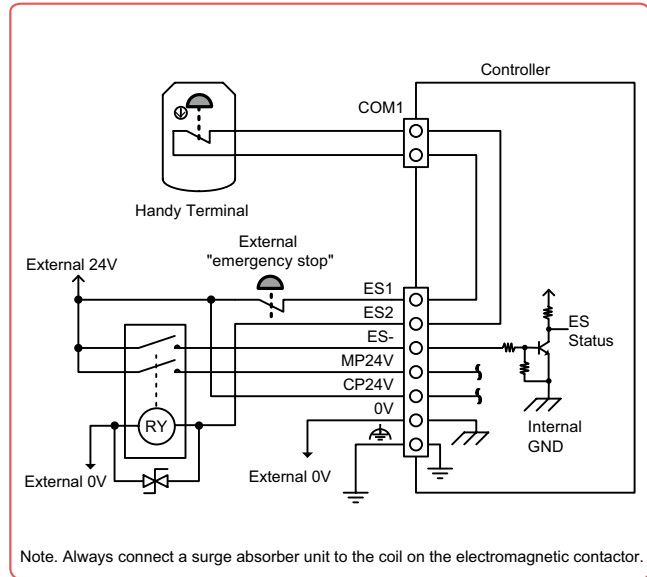
## NPN type input / output wiring diagram

### TS-S2/TS-SH



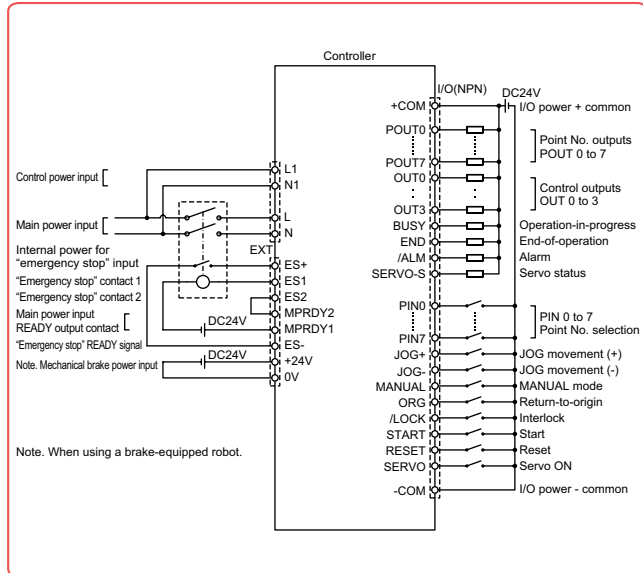
## Emergency stop circuit example

### TS-S2/TS-SH (power connector and host unit connection example)



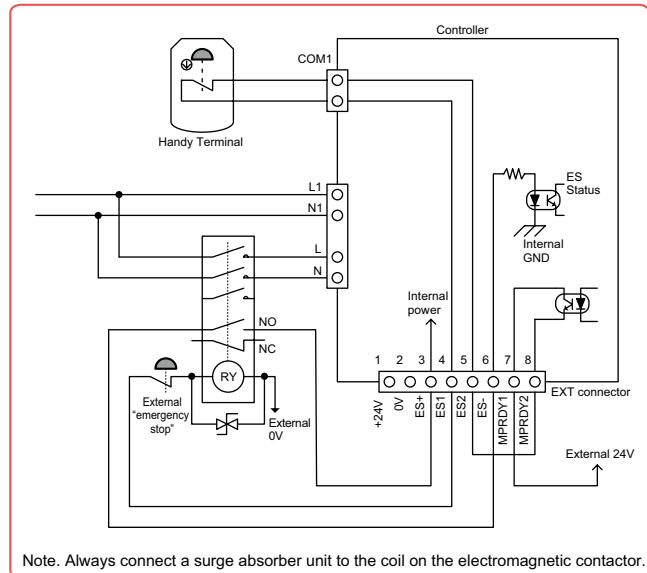
Note. Always connect a surge absorber unit to the coil on the electromagnetic contactor.

### TS-X



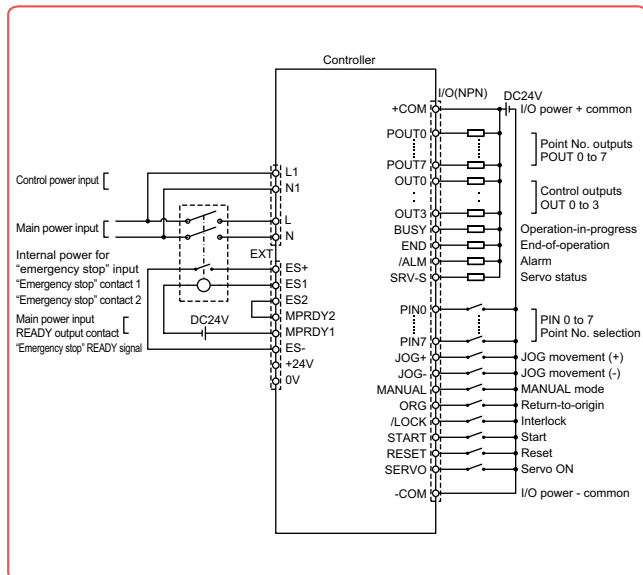
Note. When using a brake-equipped robot.

### TS-X/TS-P (EXT connector and host unit connection example)



Note. Always connect a surge absorber unit to the coil on the electromagnetic contactor.

### TS-P



Installing an external safety circuit will satisfy safety category class 4 standards. See P.645 for more information.

## I/O Specifications

Item	Description
NPN	Input 16 points, 24VDC +/-10%, 5.1mA/point, positive common Output 16 points, 24VDC +/-10%, 50mA/point, sink type
PNP	Input 16 points, 24VDC +/-10%, 5.5mA/point, minus common Output 16 points, 24VDC +/-10%, 50mA/point, source type
CC-Link	CC-Link Ver.1.10 compatible, Remote station device (1 node)
DeviceNet™	DeviceNet™ Slave 1 node
EtherNet/IP™	EtherNet/IP™ adapter (2 ports)
PROFINET	PROFINET Slave 1 node

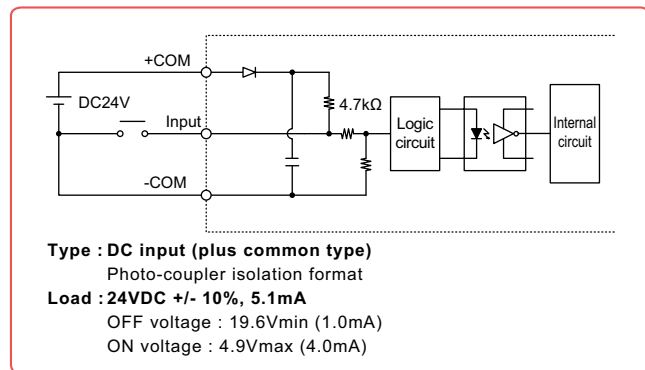
Articulated robots  
YA  
Linear conveyor modules  
LCM100  
Motor-less single axis actuator  
Robonity  
Compact single-axis robots  
TRANSEVO  
Single-axis robots  
FLIP-X  
Linear motor single-axis robots  
PHASER  
Cartesian  
XY-X  
SCARA robots  
YK-X  
Pick & place robots  
YP-X  
CLEAN  
CONTROLLER  
INFORMATION  
Robot positioner  
Pulse string driver  
Robot controller  
Electric gripper  
Option

## I/O signals (NPN / PNP)

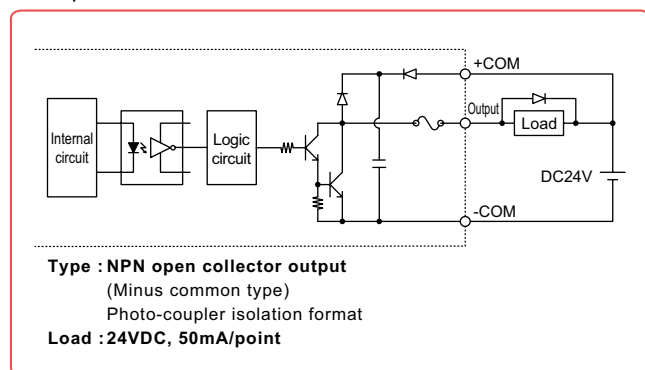
No.	Signal Name	Description	No.	Signal Name	Description
A1	+COM	I/O power input, positive common (24VDC +/-10%)	B1	POUT0	Point No. outputs
A2			B2	POUT1	
A3	NC	No connection	B3	POUT2	
A4			B4	POUT3	
A5	PIN0	Point No. select	B5	POUT4	
A6			B6	POUT5	
A7			B7	POUT6	
A8			B8	POUT7	
A9			B9	OUT0	
A10			B10	OUT1	
A11			B11	OUT2	
A12			B12	OUT3	
A13	JOG+	JOG movement (+ direction)	B13	BUSY	Operation-in-progress
A14	JOG-	JOG movement (- direction)	B14	END	Operation-end
A15	MANUAL	MANUAL mode	B15	/ALM	Alarm
A16	ORG	Return-to-origin	B16	SRV-S	Servo status
A17	/LOCK	Interlock	B17	NC	No connection
A18	START	Start	B18	NC	
A19	RESET	Reset	B19	-COM	I/O power input, negative common (0V)
A20	SERVO	Servo ON	B20		

### NPN type I/O circuit details

#### Input circuit

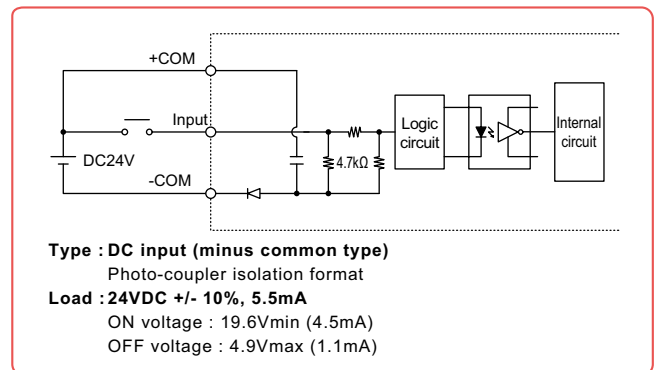


#### Output circuit



### PNP type I/O circuit details

#### Input circuit



#### Output circuit

