Pin assignment of dedicated input/output connector

	Controller	**CR800**	**CR2A/CR2B/CR3**		**CRnD**	
	Connector	CNUSR11	EXTEMG1	EXTEMG2	EMGIN	EMGOUT
Name	*Function*					
ROBOTERR21	Robot error output	1				
AXMC21	Magnet contactor control Connector output for additional axes	2				5B
EMGOUT21	Emergency stop output	3		6		1B
MODEOUT21	Mode output	4				3B
OPKEY2COM(24V)	Mode selector switch input	5				
24V2 for DOOR	Connection of door switch	6		3	8B (1)	
EXTEMG21	Construction of external emergency stop input circuit	7		1	3B (1)	
ROBOTERR11	Robot error output	8				
AXMC11	Magnet contactor control Connector output for additional axes	9	6			5A
EMGOUT11	Emergency stop output	10				1A
MODEOUT11	Mode output	11				3A
OPKEY1COM(24V)	Mode selector switch input	12				
24V1 for DOOR	Connection of door switch	13	3		8A (1)	
EXTEMG11	Construction of external emergency stop input circuit	14	1		3A (1)	
	Reserved	15				
	Reserved	16				
ROBOTERR22	Robot error output	17				
AXMC22	Magnet contactor control Connector output for additional axes	18				6B
EMGOUT22	Emergency stop output	19		5		2B
MODEOUT22	Mode output	20				4B
OPKEY2	Mode selector switch input	21				
DOOR2	Connection of door switch	22		4	9B (1)	
EXTEMG22	Construction of external emergency stop input circuit	23		2	4B (1)	
ROBOTERR12	Robot error output	24				
AXMC12	Magnet contactor control Connector output for additional axes	25				6A
EMGOUT12	Emergency stop output	26	5			2A
MODEOUT12	Mode output	27				4A
OPKEY1	Mode selector switch input	28				
DOOR1	Connection of door switch	29	4		9A (1)	
EXTEMG12	Construction of external emergency stop input circuit	30	2		4A (1)	
	Reserved	31				
	Reserved	32				
	Enabling device input				10B	
	Enabling device input				10A	
	Enabling device input				11B	
	Enabling device input				11A	

	Option: Teaching Pendant Switch Status Output Unit 2F-TBSTS-01		**CR2A/CR2B/CR3**		**CRnD**	
	Connector	CNSTS	EXTEMG1	EXTEMG2	EMGIN	EMGOUT
TB_EMGCOM1	Common	1			2A (2)	
TB_EMG1A	Output of (Emergency stop) switch channel 1 status (on/off)	2				
TB_EMG1B	Signal for relay fault detection	3			3A (2)	
TB_EMGCOM2	Common	4			2B (2)	
TB_EMG2A	Output of (Emergency stop) switch channel 2 status (on/off)	5				
TB_EMG2B	Signal for relay fault detection	6			3B (2)	
TB_ENABLECOM1	Common	7				
TB_ENABLE1A	Output of (Enable) switch channel 1 status (on/off)	8				
TB_ENABLE1B	Signal for relay fault detection	9				
TB_ENABLECOM2	Common	10				
TB_ENABLE2A	Output of (Enable) switch channel 2 status (on/off)	11				
TB_ENABLE2B	Signal for relay fault detection	12				
TB_MODECOM	Common	13				
TB_MODEA	Output of (Enable/Disable) switch status (on/off)	14				
TB_MODEB	Signal for relay fault detection	15				
	No connection	16				

(1) The safety signal inputs of CR800 controller are internal powered by pulse drive.
Only dry contacts can be used.

(2) If the EMGIN signals of the CRnD controller are powered external to use the output signals from techingbox, it has to be modified and the " Teaching Pendant Switch Status Output Unit" type 2F-TBSTS-01 is needed to get the Emergency stop switch signals.