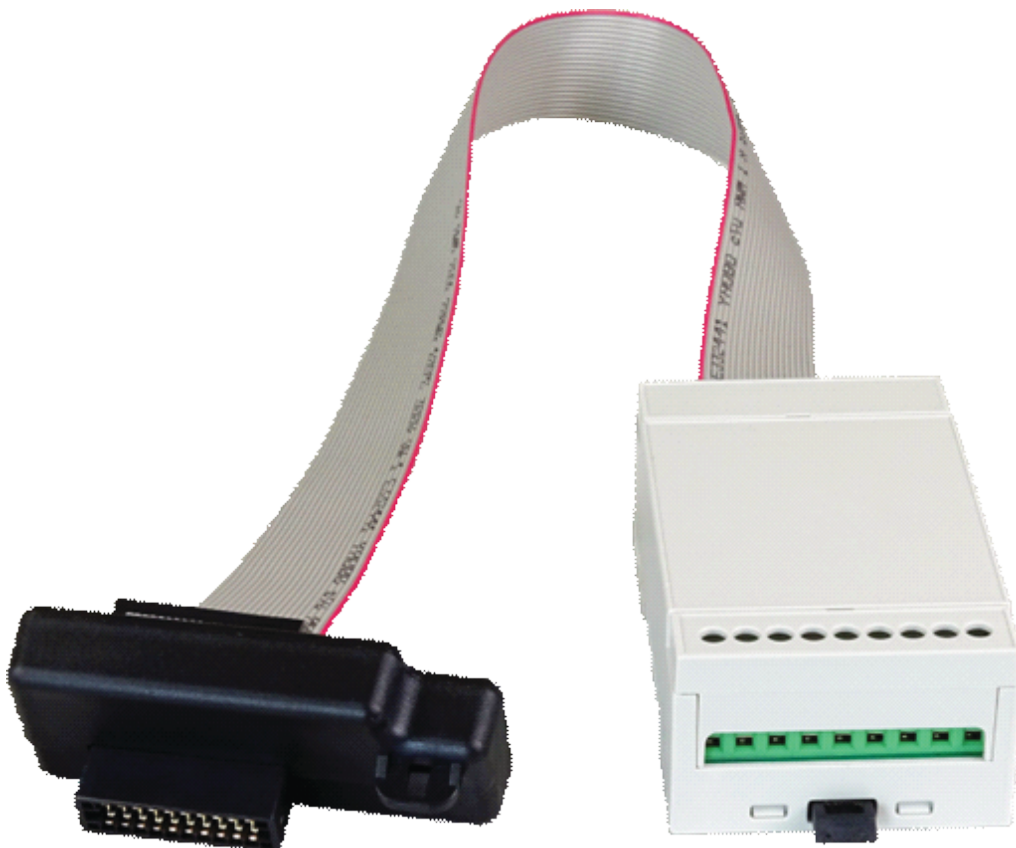




RS PRO VMX-agility

Expansion Module Installation Guide

206-051



RS PRO VMX-agility

Expansion Module Installation Guide

RSPRO
Birchington Road,
Corby,
Northants,
NN17 9RS

Introduction

The expansion module 206-051 can be used to provide extra I/O to the current range of RS PRO VMX-agility Soft-Starters. The module is self-powered, therefore there is no need for an additional supply to power it.

The expansion module provides the following additional I/O:

- 2 x Digital Inputs
- 2 x Digital Outputs
- 1x PTC Thermistor Input

Fitting

The expansion module is DIN rail mounted, allowing for easy installation.

The ribbon cable that exits out of the top of the expansion module connects into adaptor module as seen below:

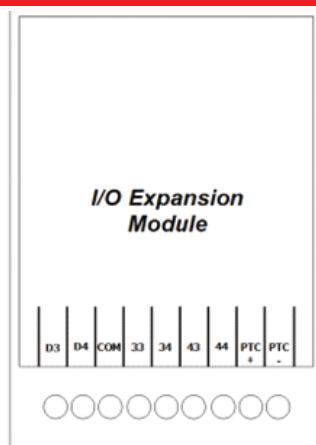


The expansion module is DIN rail mounted, allowing for easy installation.

The ribbon cable that exits out of the top of the expansion module connects into adaptor module as seen below:



Connections



Control Terminal Functions

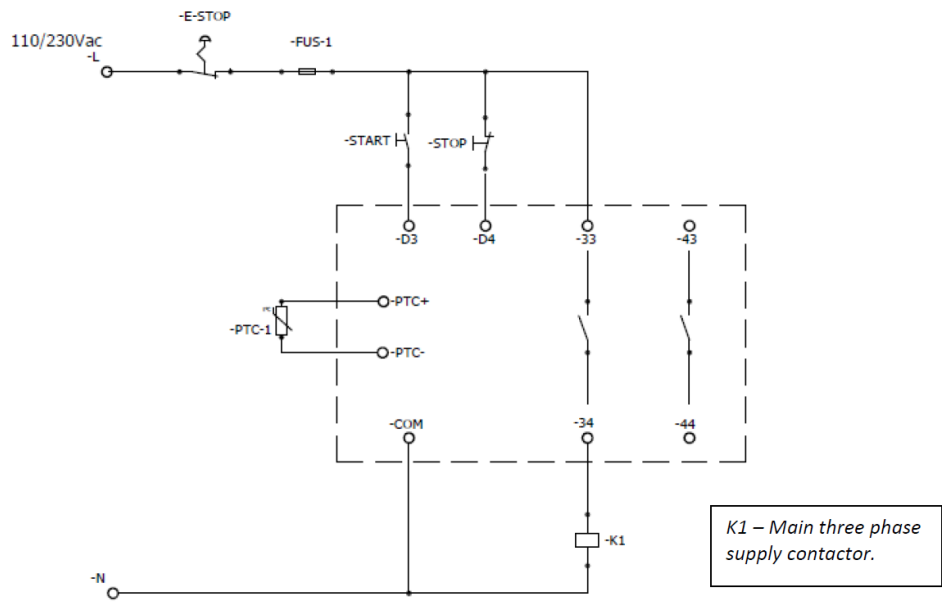
Terminal	Description	Function Selectable	Parameter options (When used with RS PRO VMX-agility)	Note
D3	Digital Input A	Yes (Via Control Function)	0 - Three Wire (D3 Start/D4 Stop) 1- Two Wire (D3 Start/Stop and reset / D4 no function) 2 - DI - Prog Reset (D3 Start/Stop) 3 - DI - Prog Hold (D3 Start/Stop and reset) 4 - DI - Prog Enable (D3 Start/Stop and reset) 5 - DI - Prog Fire (D3 Start/Stop and reset)	
D4	Digital Input B			
COM	Digital inputs Common	No		
33/34	Digital Output A	Yes	0 - End of start 1 - Fault 2 - Run 3- Pending (Auto Reset) 4 - Exceeded (Auto Reset) 5 - Breaker 6- Ph/SCR Default = Run	
43/44	Digital Output B	Yes	0 - End of start 1 - Fault 2 - Run 3- Pending (Auto Reset) 4 - Exceeded (Auto Reset) 5 - Breaker 6- Ph/SCR Default = End of Start	
PTC+	PTC Thermistor +	Yes	0 - ON 1 - OFF Default = OFF	#3
PTC-	PTC Thermistor -			
NOTES:				
#3) PTC: A single PTC motor thermistor or set of PTC motor thermistors can be connected to the PTC terminals.				

Wiring Specifications

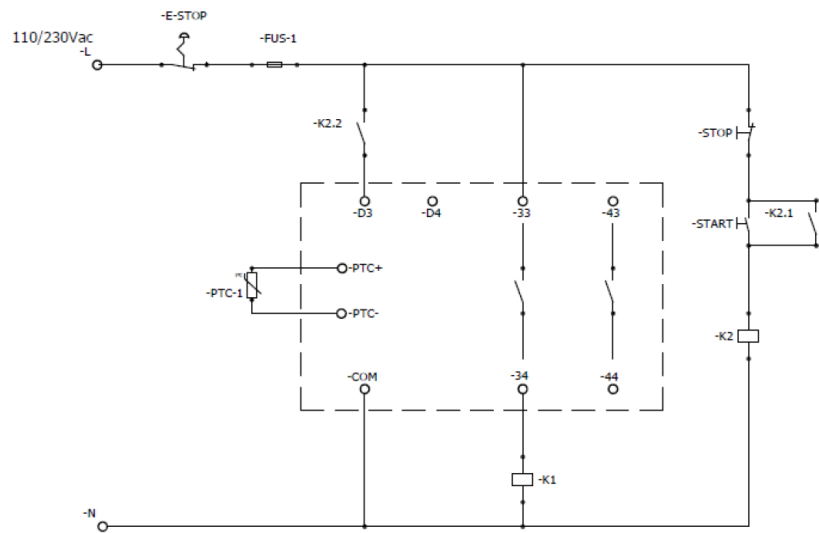
Terminal	Conductor Size		Torque	
	Metric	Imperial	Nm	lb-in
Control Terminals	0.2–1.5mm ²	24-16AWG	0.6	6.0

Wiring Connections

3 Wire Control Diagram
110/230VAC control supply (U_s)



2 Wire Control Diagram
110/230VAC control supply (U_s)



General specification

Rated insulation voltage		U _i	230VAC r.m.s	
Rated impulse withstand voltage		U _{imp}	4kV	
IP code			IP20	
Overvoltage category / pollution degree			III / 3	
Control Circuit	Programmable opto-isolated inputs		D3, D4	
	Common input, marking		COM	
	Kind of current, rated frequency		‘DC’ or ‘AC, 50-60 Hz ± 5 Hz’	
	Rated voltage		24VDC or 110VAC to 230VAC	
Auxiliary circuit	Form A = Single gap make -contact (normally open)		‘33,34’ and ‘43,44’	
	Utilisation category, voltage rating, current rating		Resistive load, 250VAC, 2A.	
			250VAC , 0.75A (AC-15 / C300)	
PTC Circuit	Trip level		3.6kΩ	
	Reset level		1.6kΩ	

Configuration and parameters



Display and Controls

Motor Overload Level:
0 to 100%

Control Keypad

Status LED:
(incorporated into centre button) Green/
Red

Status Message

Instantaneous Motor Current

Control Scheme:
Local/Control Terminal/Modbus RTU

Keypad Guidance Wizard:
Displays which keys are valid for
specific menus

Keypad Guidance Examples

Right, Down &
Centre keys Active



Left and Right
keys Active



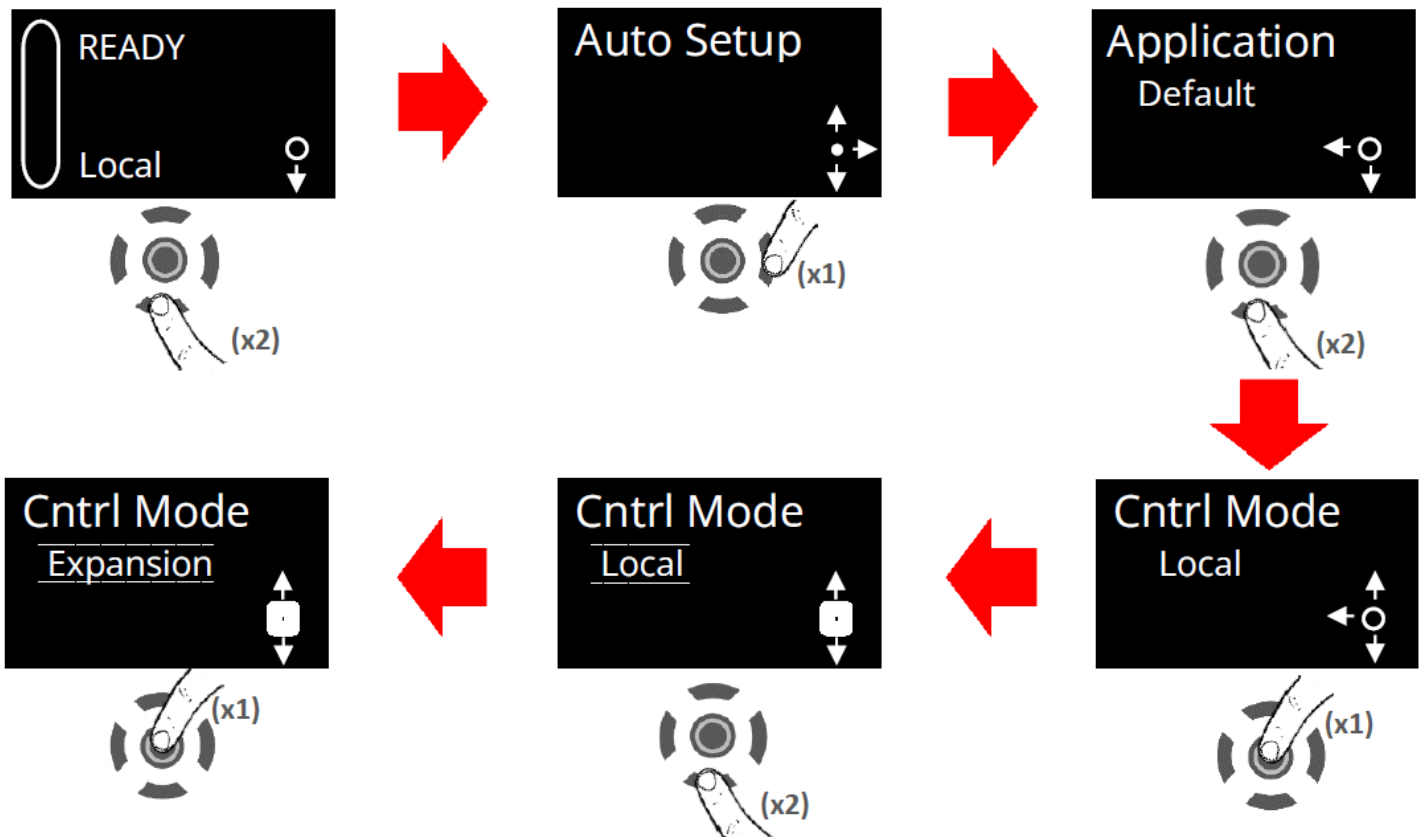
All Keys Active



Programming

Digital Input Programming

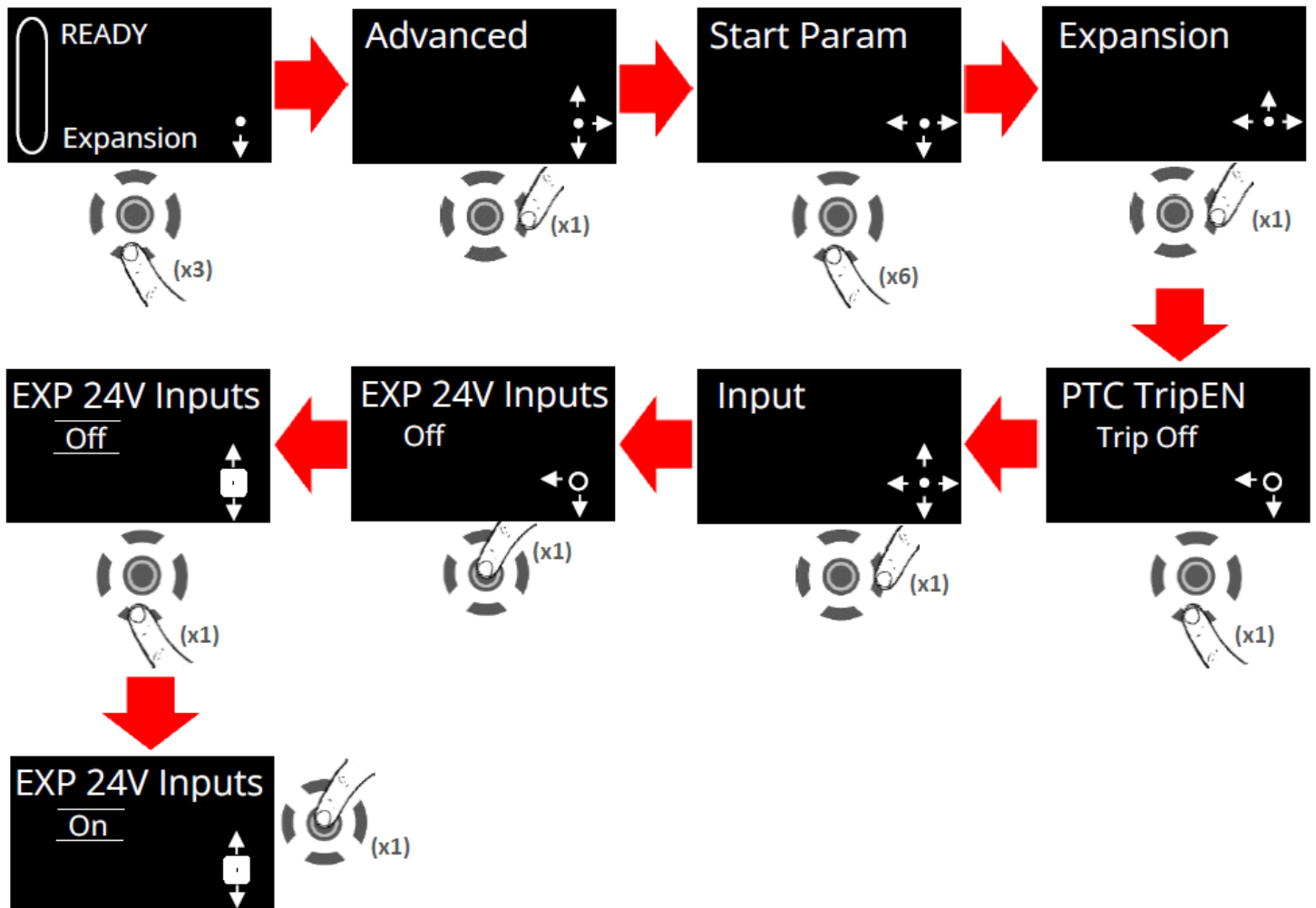
Setting the Control mode to "Expansion"



Programming

Digital Input Programming

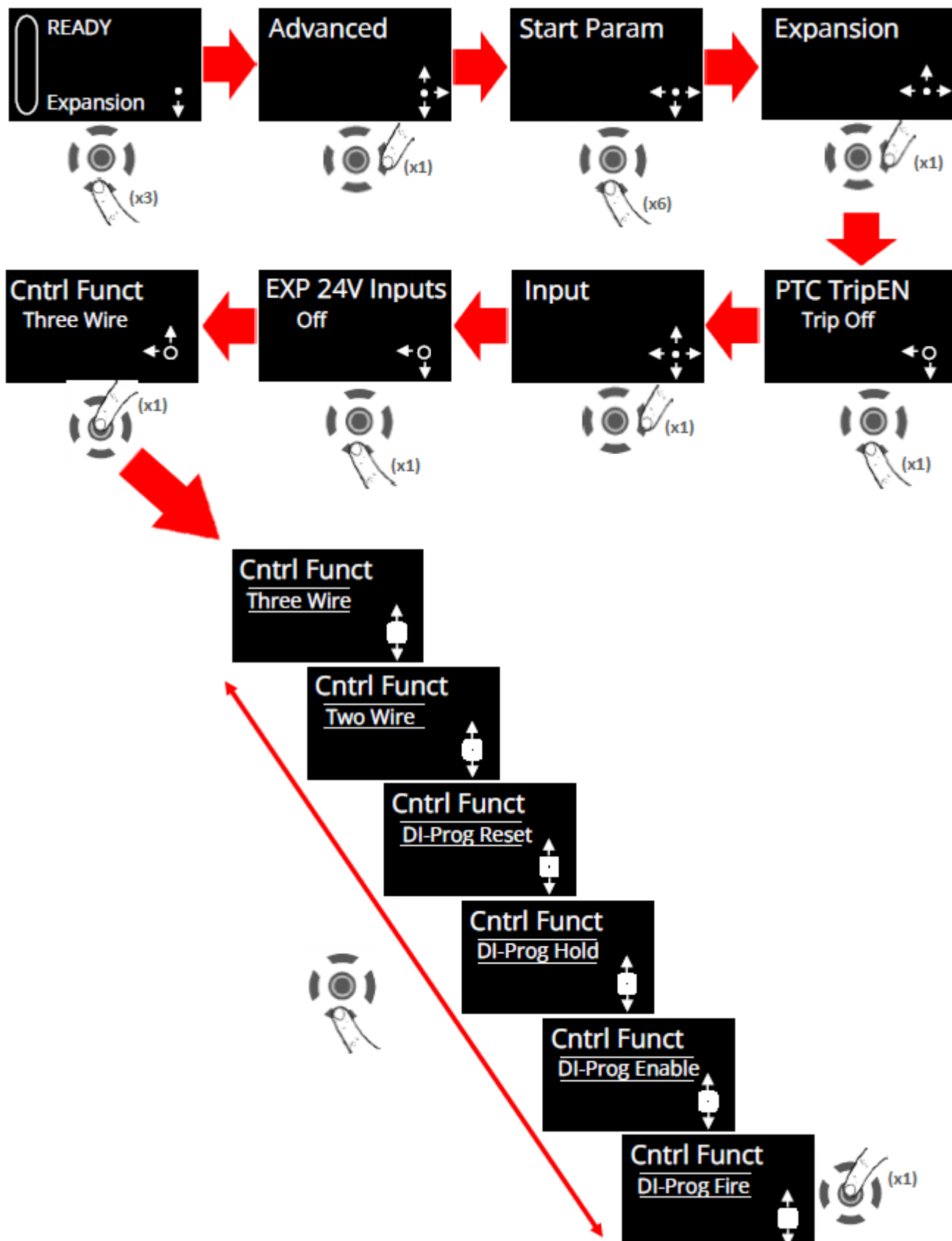
Setting the Control inputs to 24VDC (Off = 24VAC / On = 24VDC)



Programming

Digital Input Programming

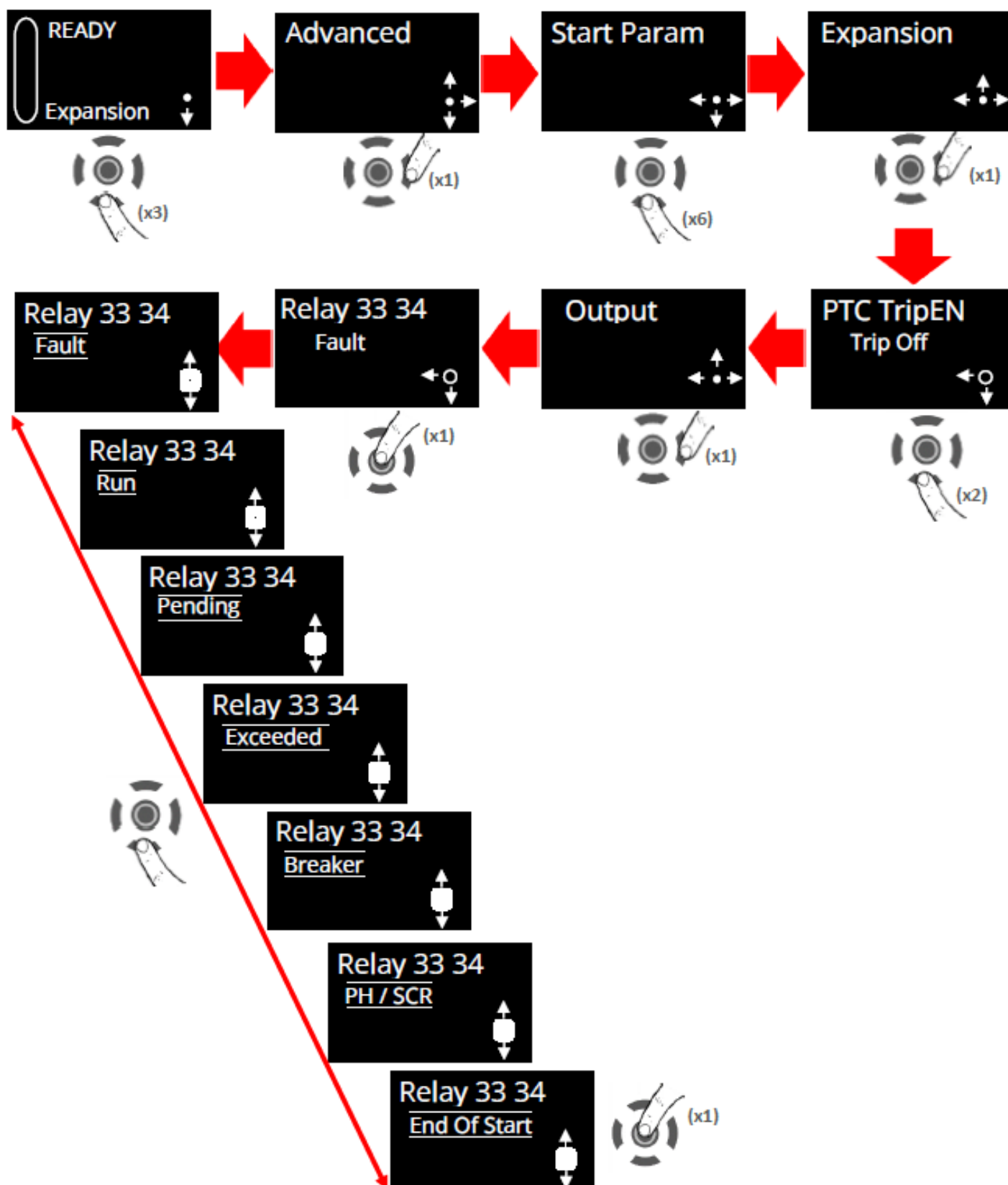
Selecting the control input function



Programming

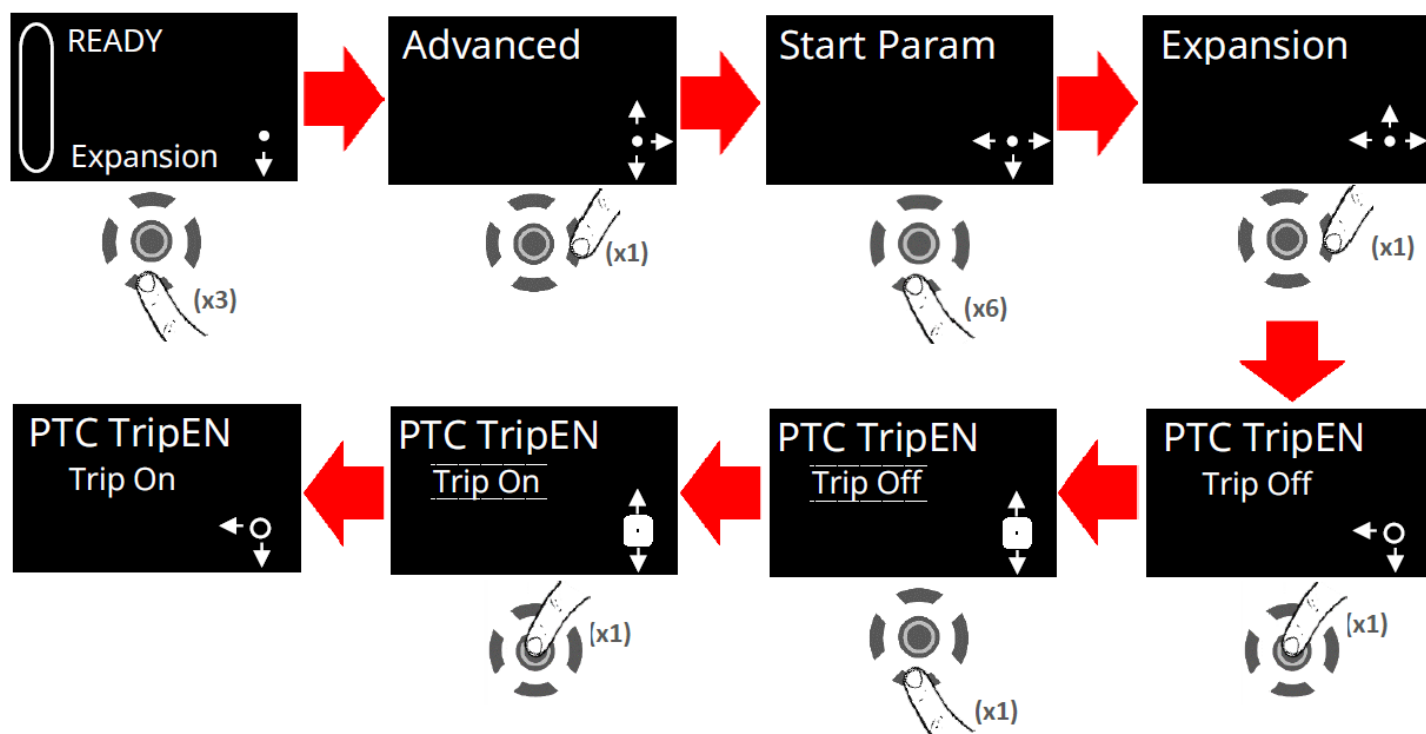
Digital Output Programming

Selecting the control output function



Programming

Activate the PTC Thermistor Trip



Notes

[illegible]

Notes

[illegible]

Notes

[illegible]



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