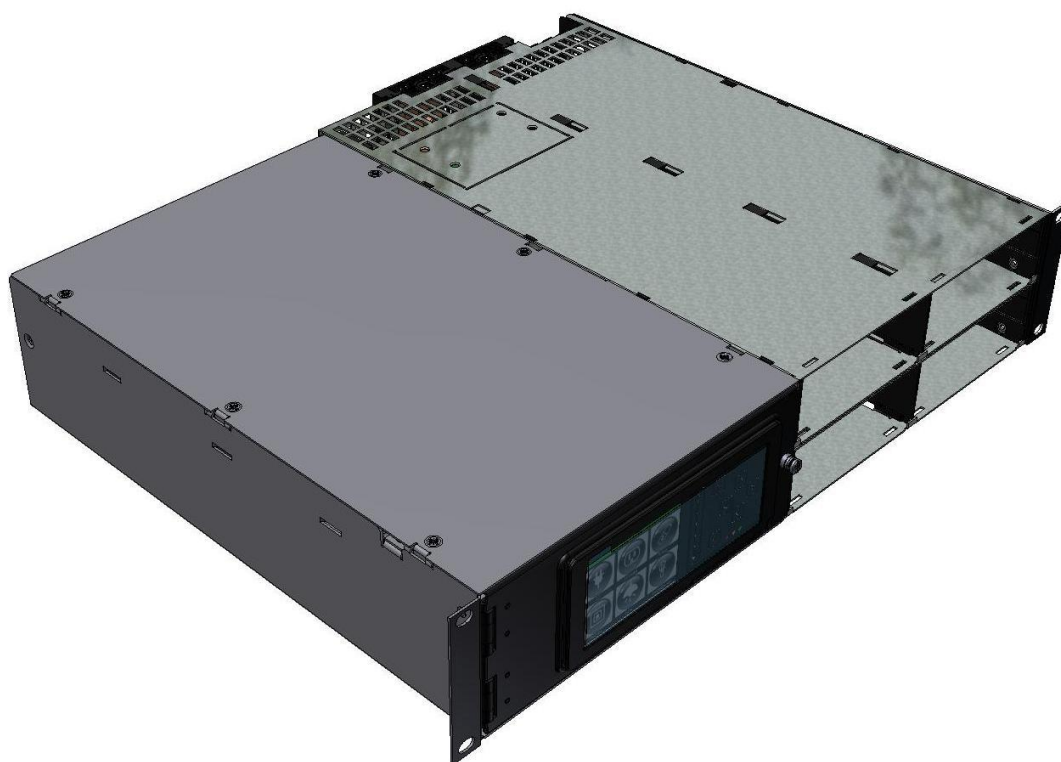


Engineering Part Catalogue

Flatpack2 Small 2G

Basic Configurations and Options parts



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1 INTRODUCTION

The Integrated 19" 2U power supply is built around the Flatpack2 rectifier and designed for applications such as switchgear, telecom, emergency lighting and alarm systems.

Its compact design and simple installation make it a powerful 19" power supply package.

The rectifier's wide DC output range makes it suitable for parallel operation with all types of stationary batteries, including lead acid, or nickel cadmium types.

KEY FEATURES

- Compact design and simple installation
- 85-300V AC or DC Input
- House up to 4 rectifier modules
- 24-220V DC systems
- Bulk feed output
- Graphical 3.2" TFT high contrast, high resolution color display for easy navigation in user menu
- Ethernet for remote or local monitoring and control via WEB Browser
- SNMP protocol with TRAP, SET and GET on Ethernet. Email of TRAP alarms
- 6 digital programmable relay outputs
- 6 programmable multipurpose inputs ("digital inputs" or analog signals)

1.1 References

Relevant documents:

Document number	Description	Comments
2118464	Flatpack 2 Power rack CAN references	Important reference document for system voltages above 60Vdc

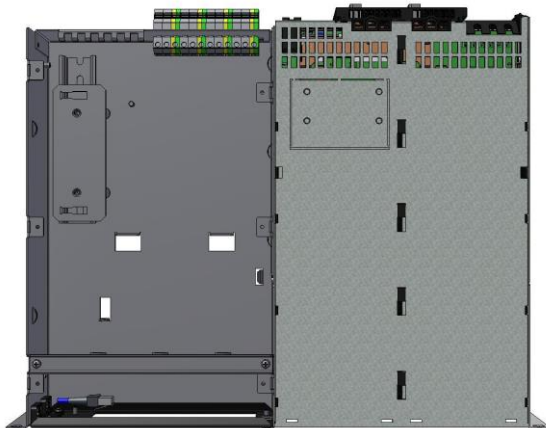
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2 BASIC KITS

Basic kits are not pre-assembled. Typical final configuration includes ac/dc requirements, controller selection (SP2 only) and temperature sense selection.

The system design and configuration options are not limited to the basic configurations, other combinations can be engineered.

2.1 Basic configuration

Part Number	Pictures
301376 KIT: Base 2U FP2 12kW 4AC screw SP2 G1	 Top view no top cover  Front view with door  Front view without door
Features: • 2 PR, FP2 PS 2 rect 2AC HC • Maximum 300Adc, • 24, 30, 48, 60, 110 and 125Vdc • Provision for Smartpack2 Basic • Provision for Smartpack2 Master • Provision for I/O monitor type 2 • Rear mounted input connection & load connections	

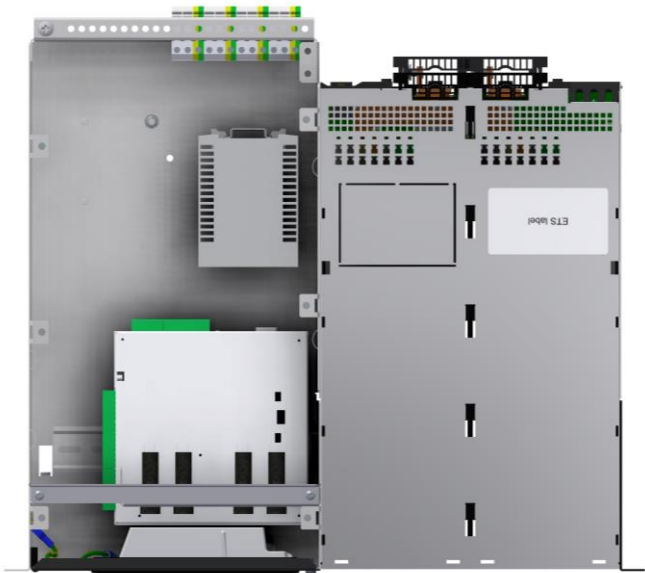
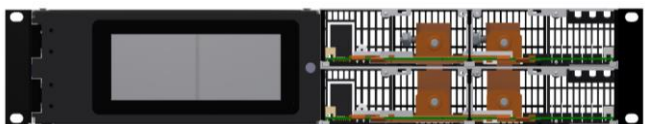
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2.2 Optional configuration

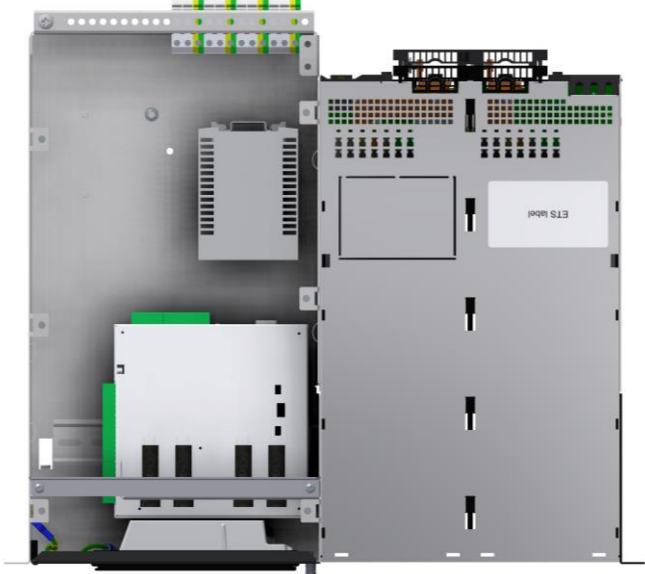
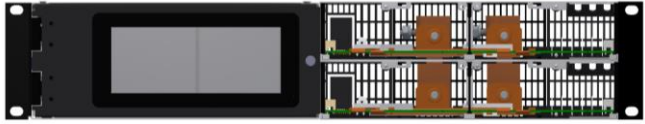
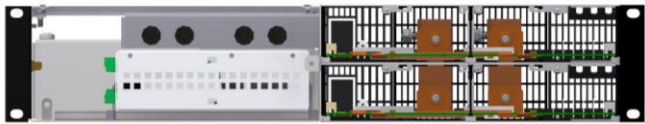
Part Number	Pictures
358206 Base 2U FP2 8kW 110/220Vdc 4AC screw SP2 Features: • 2 PR, FP2 PS 2 rect 2AC HC • Maximum 300Adc, • 110 and 220Vdc • Provision for Smartpack2 Basic Industrial • Provision for Smartpack2 Master • Rear mounted input connection & load connections • Provision for Fleximonitor + Relay KIT with 4x/8x Relay Outputs.	 Top view no top cover  Front view with door  Front view without door

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2.2.1 Building blocks

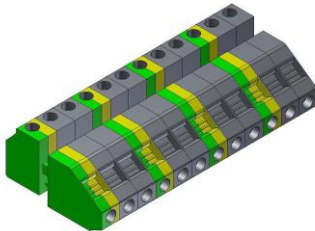
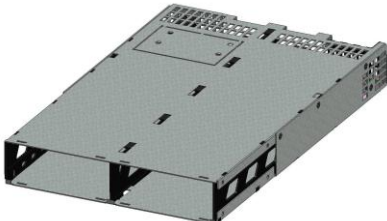
Part Number	Pictures
M20402.023 FP2 110Vdc 8kW 2U Ind Fd Features: • 2 PR, FP2 PS 2 rect 2AC HC • Maximum 300Adc, • 110 Vdc • Rear mounted input connection & load connections • Smartpack2 Basic Industrial • Smartpack2 Master • Provision for Fleximonitor + Relay KIT with 4x/8x Relay Outputs.	 Top view no top cover  Front view with door  Front view without door

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Part Number	Pictures
M20402.022 FP2 220Vdc 8kW 2U Ind Fd Features: • 2 PR, FP2 PS 2 rect 2AC HC • Maximum 300Adc, • 220 Vdc • Rear mounted input connection & load connections • Smartpack2 Basic Industrial • Smartpack2 Master • Provision for Fleximonitor + Relay KIT with 4x/8x Relay Outputs.	 Top view no top cover  Front view with door  Front view without door

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2.2.2 Mechanical parts

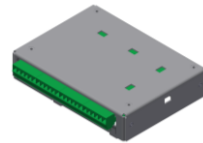
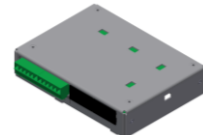
PN	Description	Picture	qty
301608	KIT: Box cabinet 2U w/UL&ZH cables		1
358254	KIT: Base Box 2U with UL&ZH cables		1
295103 295104	TERM:Block panel HDFKV 4 G1 TERM:Block panel HDFKV4 GNYE G1		8 4
252189	FP2 PS 2 rect 2AC HC		2
301335	Mech:busbar 2U up to 300A		2
105398 295927	Plastic cover DC PR Flatpack2 G1 SCREW Bossard :M3x20 DIN7500M G1		1 2

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265782 201947	Mounting bkt 2U R-L Pr2 19" Blk G1 SCREWpz2sunk:M4x5=zinc DIN965 G1		1 8
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2.3 Controller for Flatpack2 integrated 19" 2U

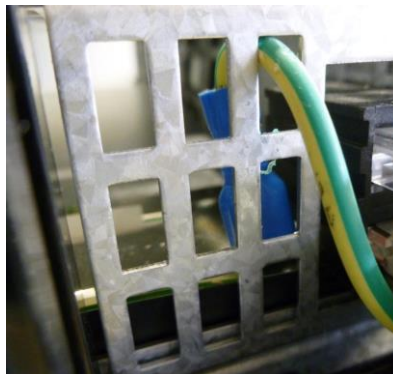
This section lists all the valid controller parts for Flatpack2 integrated 19" 2U. If your requirements are not met with these valid options, you need to select another type of the system.

PN	Description	Picture	qty
242100.500	Smartpack2 Master		1
242100.501	Smartpack2 Basic		1
242100.601	Smartpack2 Basic Industrial		1
242100.502	I/O Monitor type 2		1
242100.603 242100.607	Fleximonitor		1
242100.604	Fleximonitor Relay x8 KIT		1
242100.605	Fleximonitor Relay x4 KIT		1

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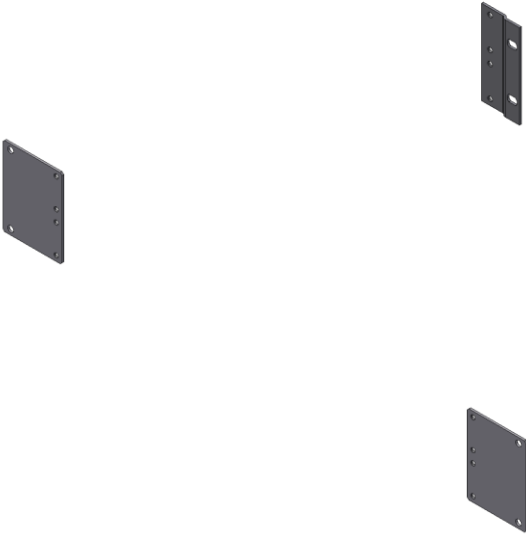
2.4 Grounding loom for 110, 125V and 220V DC only

The grounding loom must be included for every 110,125 and 220V DC system!

PN	Description	Picture	qty
304192	KIT: ground loom for FP2 INT 19" 2U		1

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2.5 Accessories (Optional)

PN	Description	Picture/Comment	Max qty
281519 280584 284609 317525	Temp sense (UL, halogen free): Loom:LSZH Temp Sense 470K NTC 1.5m Loom:LSZH Temp Sense 470K NTC 3m Loom:LSZH Temp Sense 470K NTC 10m Loom:LSZH Temp Sense 470K NTC 30m		1
283718 292774	Ethernet/CAN cables(UL,halogen free): CAN BUScable 2m RJ45 Halogen free CAN BUScable 4m RJ45 Halogen free		1
277100	2U adapters to 21" & 23": KIT 2U adapter 19" to ETSI G1		1
278397	Kit 19/23" 2U adapter FPC G1		
217984 281096 222857	Packing: PACKkit:Fp2 integ.2U+ETSI ada ST G1 PACKkit:Fp2 inte.2U+ETSI+KITs ST G1 PACKkit:Fp2 integ.2U+ETSI ada EX G1	Standard packing for FP2 Integrated w/o SPD Standard packing for FP2 Integrated with SPD Export packing for FP2 Integrated with or w/o SPD	1

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2.6 Rectifiers and converters

2.6.1 24V-30V Systems

PN	Description	Picture	Max qty
241115.205 241115.250	Flatpack2 24V/1800W HE Flatpack2 24V/2000W WOR		4

* 241115.200 can't be used on because the output current exceeds 300A!

2.6.2 48V-60V Systems

PN	Description	Picture	Max qty
241115.705 241115.100 241115.105 241119.100 241119.105	Flatpack2 48-60V/2000W HE Flatpack2 48V/2000W Flatpack2 48V/2000W HE Flatpack2 48V/3000W Flatpack2 48V/3000W HE		4

2.6.3 110V-125V Systems

PN	Description	Picture	Max qty
241115.805	Flatpack2 110-125/2000W HE		4

2.6.4 220V Systems

PN	Description	Picture	Max qty
241115.815	Flatpack2 220/2000 HE		4

2.6.5 24V DC/DC Converter

PN	Description	Picture	Max qty
241115.205	Flatpack2 24V/1800W HE		4

2.6.6 48V-60V DC/DC Converters

PN	Description	Picture	Max qty
241115.705 241115.105	Flatpack2 48-60V/2000W HE Flatpack2 48V/2000W HE		4

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2.6.7 110V-125V DC/DC Converters

PN	Description	Picture	Max qty
241115.805	Flatpack2 110-125/2000W HE		4

2.6.8 220V DC/DC Converters

PN	Description	Picture	Max qty
241115.815	Flatpack2 220/2000 HE		4

2.6.9 Blind panels

PN	Description	Comment	Max qty
236408 104941	Blind panel FP2 HE Black G1 Blind panel FP2 silver G1		As req.

2.7 AC SPD's

2.7.1 Citel

PN	Description	Comment	Max qty
265376 324551	Kit Citel SPD 400VAC 3Ph TN MP/FPS Loom:SPD Kit 400/3ph TN FP2 Integ	400V AC 3ph, TN	1 1
335712 336556	Kit Citel 4P SPD 230VAC 3Ph IT MP/FPS/FP2 Loom:SPD Kit 230/3ph IT FP2 Small 2G	230V AC 3ph, IT	
265287 324561	Kit CIT SPD 230VAC 1ph TN MP/uP/FPS Loom:SPD Kit 230/1ph TN FP2 Integ	230V AC 1ph, TN	
265309 324562	Kit Citel SPD230VAC1ph IT MP/uP/FPS Loom:SPD Kit 230/1ph IT FP2 Integ	230V AC 1ph, IT	
213437	DIN rail W=35mm H=15mm L=245mm G1	DIN rail for SPD	1

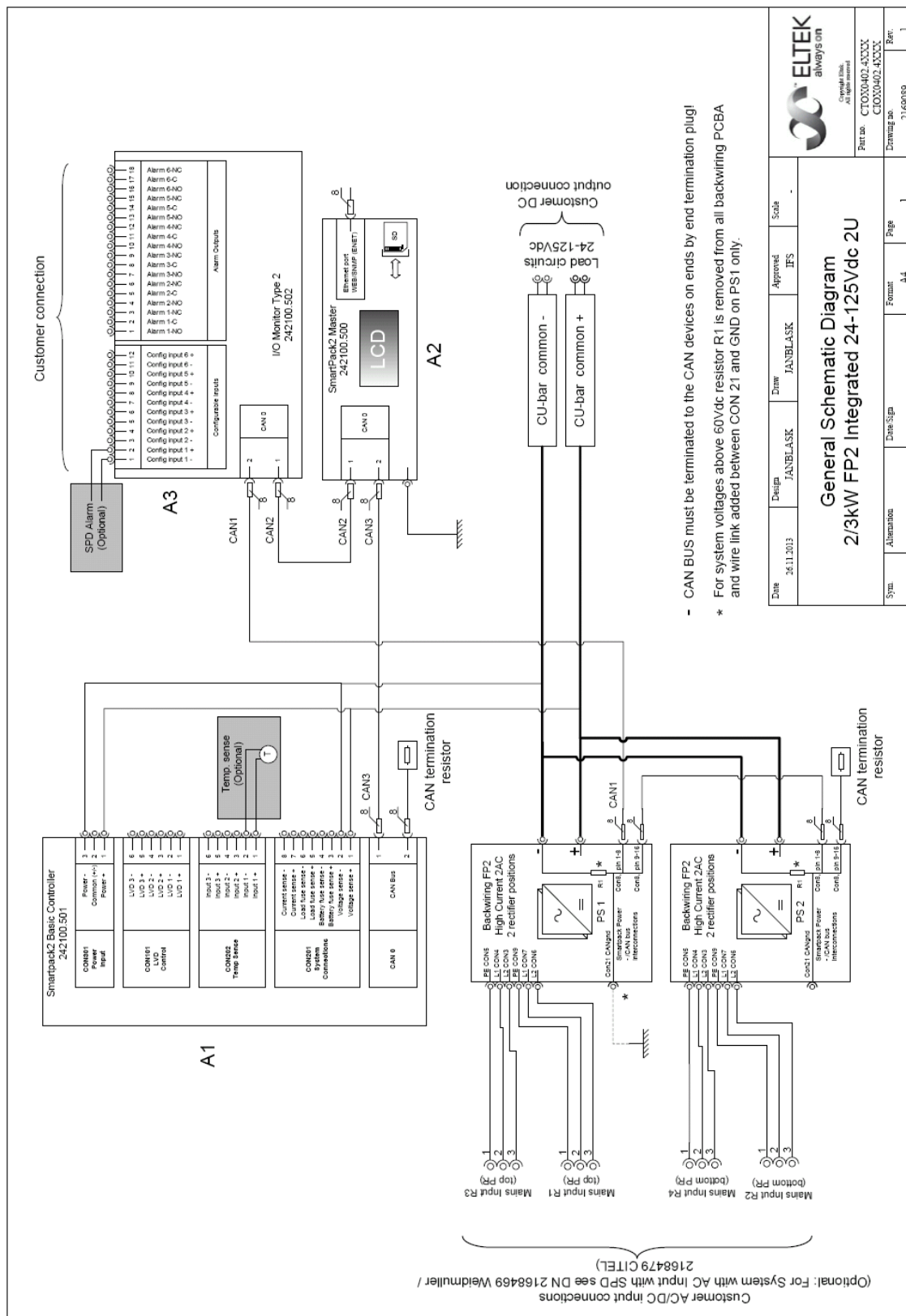
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2.7.2 Weidmuller

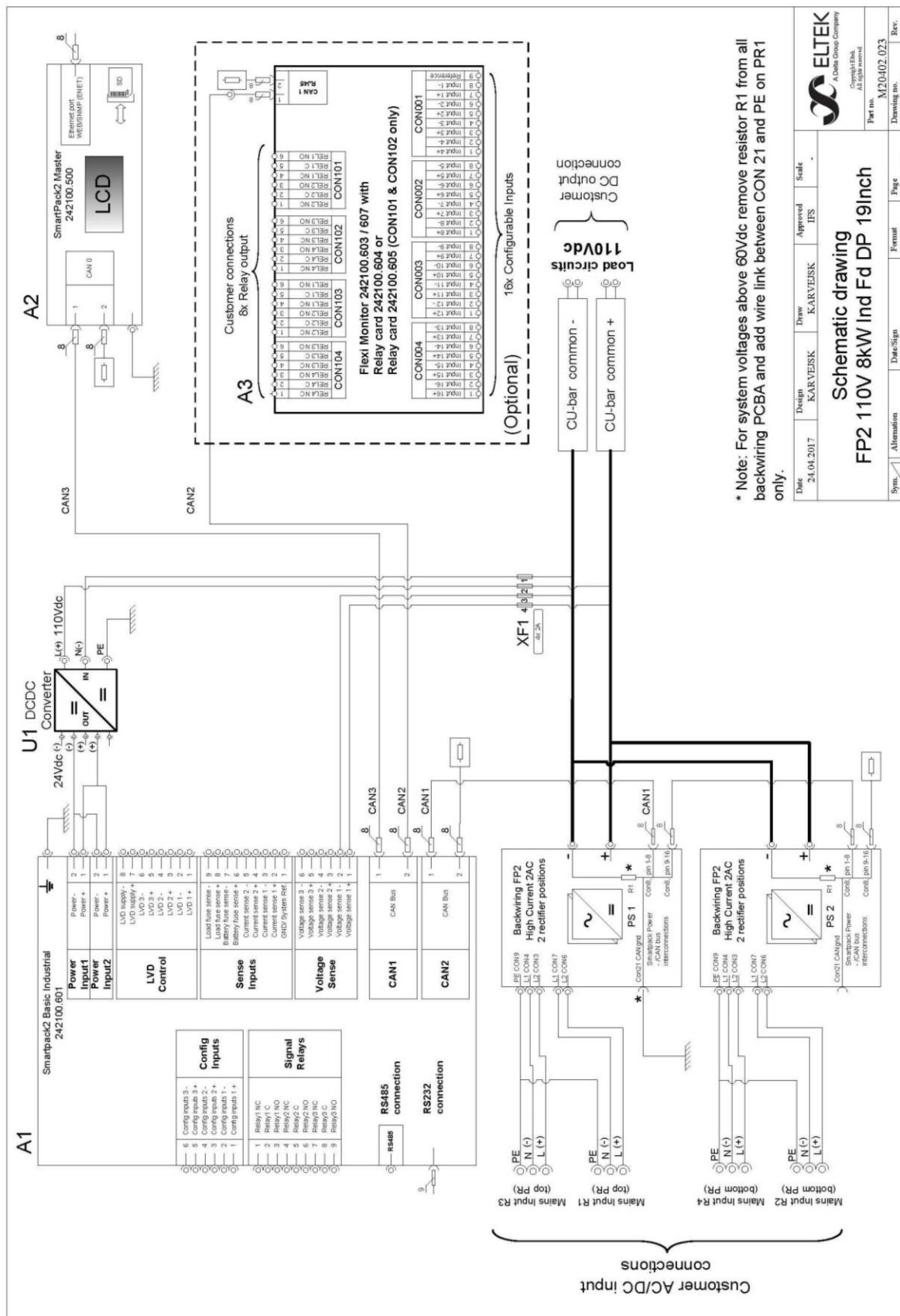
PN	Description	Comment	Max qty
225150 324551	Kit SPD 400 VAC 3Ph TN MP/FPS G1 Loom:SPD Kit 400/3ph TN FP2 Integ	400V AC 3ph, TN	
225264 324561	Kit SPD 230 VAC 1ph TN MP/uP/FPS G1 Loom:SPD Kit 230/1ph TN FP2 Integ	230V AC 1ph, TN	1 1
225289 324562	Kit SPD 230 VAC 1ph IT MP/uP/FPS G1 Loom:SPD Kit 230/1ph IT FP2 Integ	230V AC 1ph, IT	
213437	DIN rail W=35mm H=15mm L=245mm G1	DIN rail for SPD	1

3 Drawings

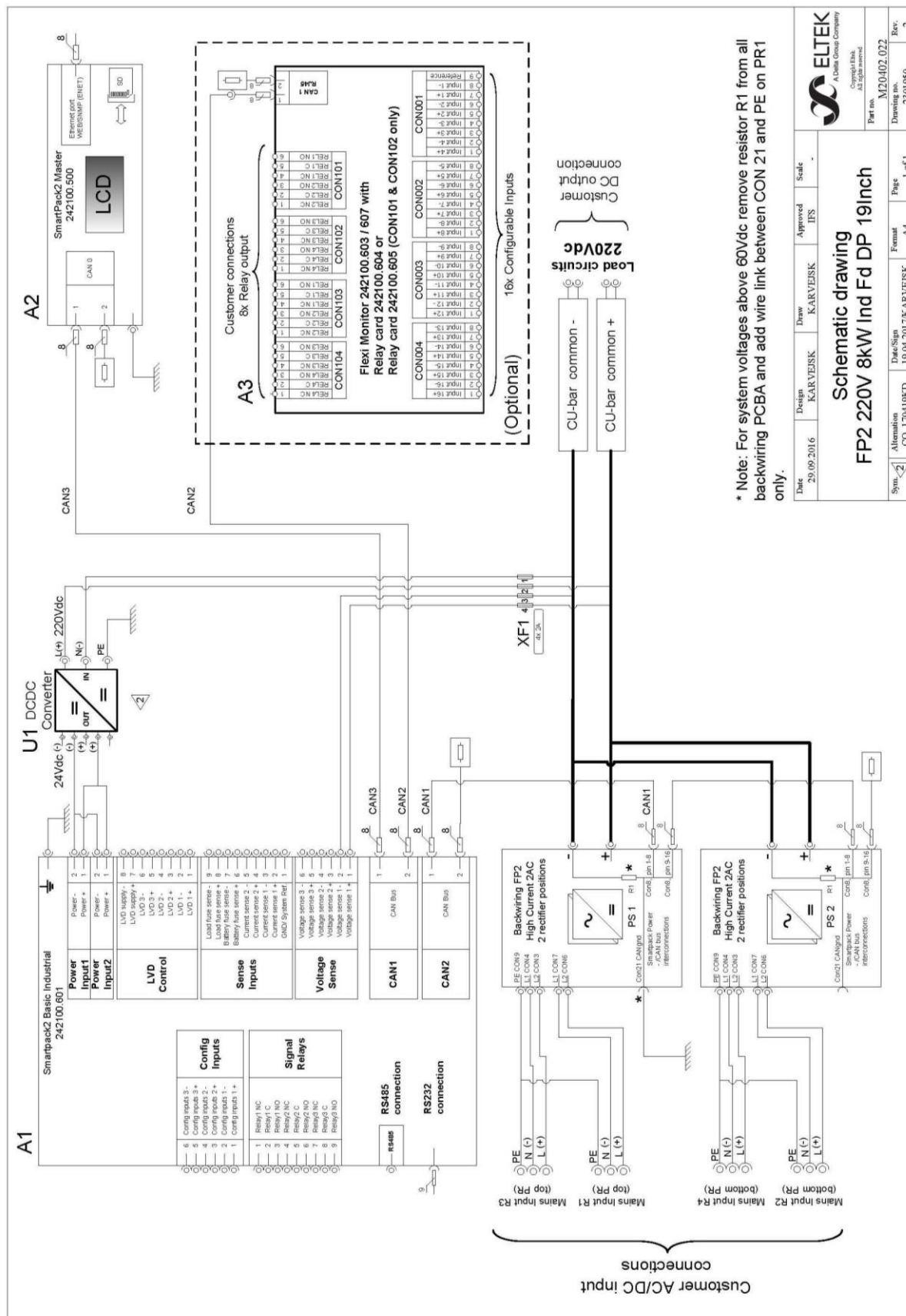
3.1 Schematic Diagram 2-3kW FP2 Integrated 24-125Vdc 2U



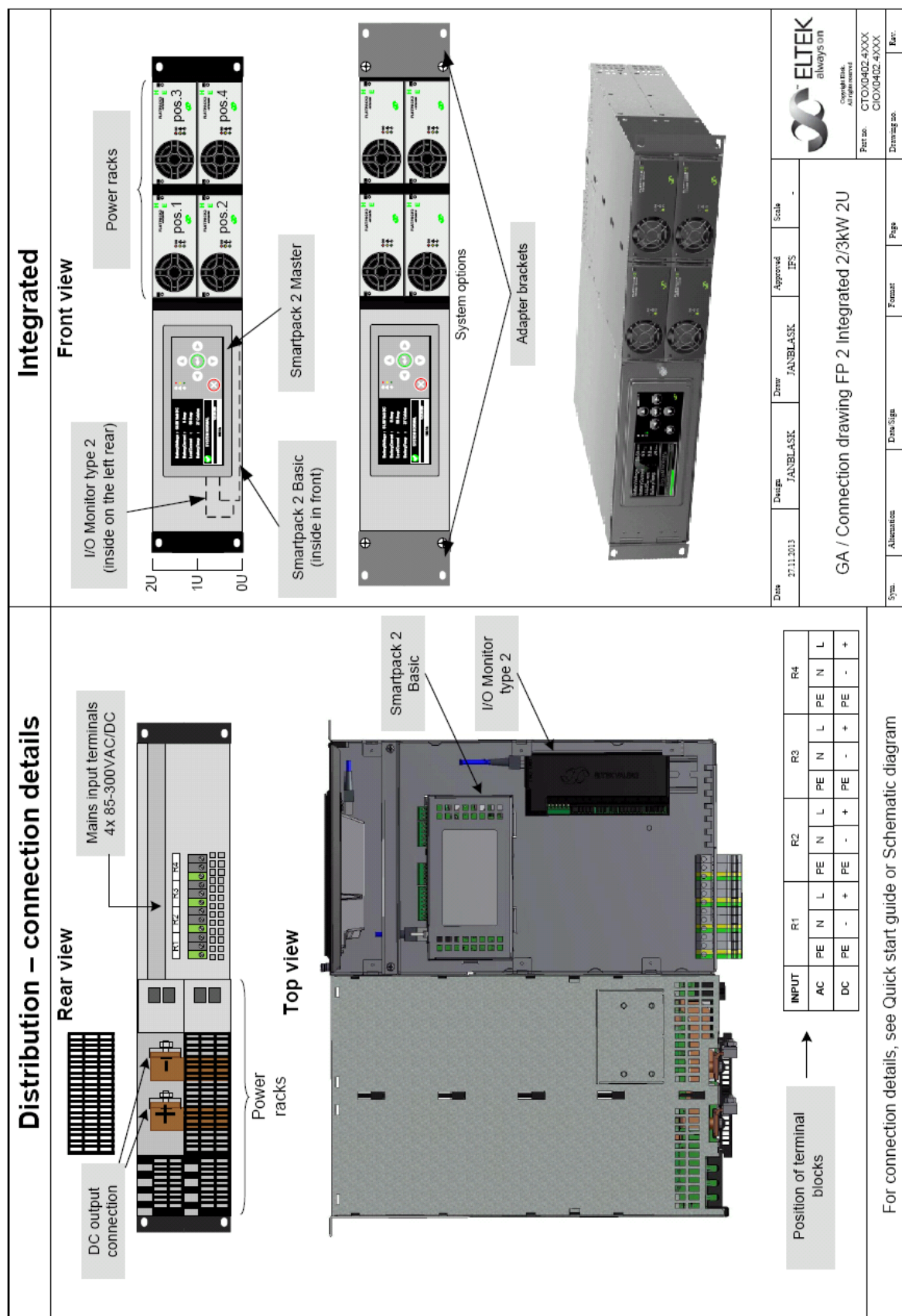
3.2 Schematic drawing FP2 110V 8kW Ind Fd DP 19Inch



3.3 Schematic drawing FP2 220V 8kW Ind Fd DP 19Inch



3.4 Connection drawing 2-3kW FP2 Integrated 24-125Vdc 2U



3.5 Connection drawing FP2 110/220V 8kW Ind Fd DP 19Inch

