

# Power Supplies & Transformers

## Universal Power Supplies



single/three phase  
100-500 V 72 W-960 W

### *Performance and service for your automated systems*

*A new generation of regulated switch mode power supplies for single and three-phase networks delivering 3 A to 40 A. Their extremely wide operating range and their integration of a large number of new functions make them the new reference in universal power supply.*

## Optimum, Modular Power Supplies

### *Simple and compact*

*Designed for simple applications and machines, optimum and modular power supplies are primarily appreciated for their highly compact size.*



single phase  
100-240 V 7 W-145 W

## Dedicated Power Supplies



single phase  
100-240 V 60 W-240 W

### *Tailor-made for your repetitive machines...*

*Designed for simple and repetitive commercial machines, a range of competitive high quality dedicated power supplies.*

# Contents

- Modular, Optimum, Universal Power supplies  
**Phaseo ABL7, ABL8** ..... 6/2 to 6/5
- Dedicated, Filtered Rectified Power supplies  
**Phaseo ABL7, ABL8** ..... 6/6
- Transformers  
**Phaseo ABL6, ABT7** ..... 6/7

Discover 6/2 and 6/3 pages the fonction modules to answer for the different problemes as network cut, 24 VDC circuit overlaod and availability

## Filtered Rectified Power Supplies

### *Ruggedness serving your applications*

*Filtered rectified models are used for supply of circuits not requiring output voltage regulation, such as: solenoid valves, contactors, etc.*

*Their simple and proven technology enables them to offer greatly extended working life.*



*single/three phase  
230-400 V / 12 W-1440 W*

## Transformers

### *A response to each requirement*

*3 transformer ranges: the high performance Universal range with double windings and innovative product design, the Optimum range, a generation of proven products with single winding and the Economy range for repetitive automated systems.*



*single phase  
230-400 V 25 VA-2500 VA*

# More service...

## Network cuts

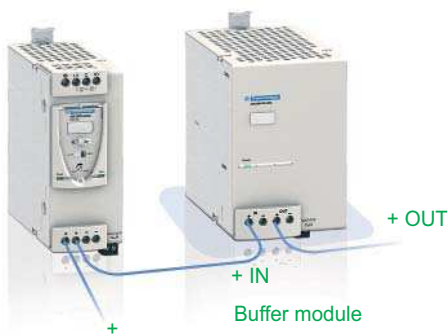
Network voltage interrupts create equipment operating irregularity that can result in production losses and even require maintenance team intervention for restarting.

### Phaseo universal solutions can:

- Render microcuts «transparent» for equipment
- Enable equipment stop with necessary data backup, so allowing restart without problems at return of network voltage.

### Buffer module solution

Microcuts < few secondes



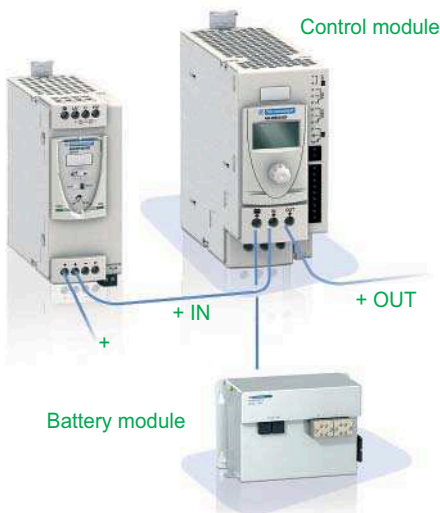
### Simple and efficient

- No setting required
- Diagnostic relay contact (module charge state)
- Standard and backup circuit separation possible.



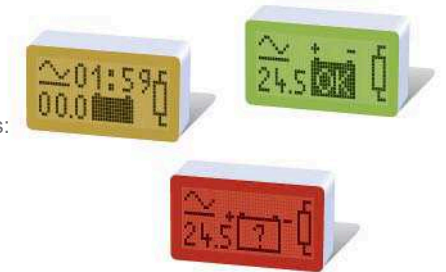
### Battery backup solution

Cuts > few secondes



### Total confidence

- Battery state automatic test
- Advanced and user-friendly diagnostics:
  - Power supply operation
  - Battery operation
  - Fault presence.

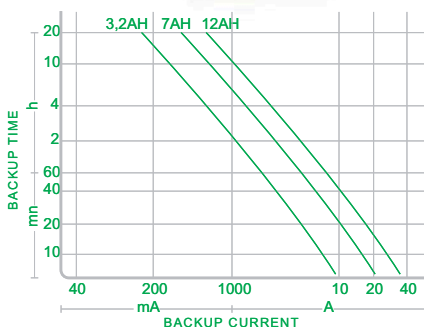


### Flexible and adaptable

- 2 current supply modules are available:
  - Backup until complete battery discharge (battery is however disconnected before overdischarge)
  - Backup for an adjustable time period, keeping energy in reserve in case of a closely following cut.

### Quick installation

- Copy of configuration between 2 modules using memory cartridge
- Quick configuration of battery control module by a single selector switch and display pictograms.



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## 24 VDC circuit overload

Protection of circuits supplied in DC low voltage has traditionally been by fuses or electromechanical circuit-breakers. In certain cases (notably short-circuits) this protection is not sufficiently selective, and electronic protection of the power supply suspends low voltage supply before downstream protections can react.

The Phaseo solution is a 4-starter electronic protection module, dedicated to ABL 8R/W Universal power supplies.

Each of these starters is adjustable from 1 to 10 A.

### High-performance solution ensuring service continuity

- Selectivity enabling isolation of fault circuits only
- Advanced diagnostics by LED and relay contact
- Manual opening of each circuit by switch
- Lead-sealed settings.

### Minimised stock levels

- 1 product reference each covering 1 to 10 A.

### Starter protection solution



Protection module



## Availability

On certain equipment, the consequences of a 24 V control voltage breakdown can be extremely detrimental and can justify paralleling 2 or more power supplies to maintain faultless operating continuity.

The Phaseo solution consists of coupling 2 universal power supplies with an electronic redundancy module.

The primaries of these power supplies can be on the same or on different networks.

### Service continuity in total confidence

- Advanced diagnostics by LED
- C/O contact enables signalling of fault in one of the 2 power supplies and alerts maintenance.

### Redundancy solution



Redundancy module





Type of power supply	Modular, regulated switch mode with automatic reset					
Rated input voltage	100...240 VAC					
Rated output voltage	24 V			5 V		12 V
Rated power / Rated current	7.5 W / 0.3 A	15 W / 0.6 A	30 W / 1.2 A	60 W / 2.5 A	20 W / 4 A	25 W / 2 A
Reset	Auto					
Conformity to IEC 61000-3-2	Without					
Certifications	cULus, cCSAus, TUV, CE, C-Tick					
Dimensions (mm)	36x59x90		54x59x90	72x59x90	54x59x90	
Fixing (mm)	DIN rail 35x7.5 or 35x15 or on panel mount by screw					
References	ABL8MEM24003	ABL8MEM24006	ABL8MEM24012	ABL7RM24025	ABL8MEM05040	ABL8MEM12020



Type of power supply	Universal, regulated switch mode with automatic or manual reset		
Rated input voltage	100...120 VAC and 200...500 VAC		
Rated output voltage	24 V		
Rated power / Rated current	72 W / 3 A	120 W / 5 A	240 W / 10 A
Permissible temporary inrush current (boost)	1.5 In during 4 s		
Conformity to IEC 61000-3-2	Yes		
Diagnostic relay (output voltage > 21.6V)	No	Yes	
Certifications	UL (in progress), cCSAus, CB scheme, CE		
Dimensions (mm)	44x120x143	56x120x143	85x140x143
Fixing (mm)	DIN rail 35x7.5 or 35x15		
References	ABL8RPS24030	ABL8RPS24050	ABL8RPS24100



Type of module	Microcuts and cuts network solutions. Fixing Omega rail clip-in (1)		
Compatibility	Output connection of Universal power supplies ABL8RPS24... and ABL8WPS24...		
Technology	Buffer module	battery backup module + battery	
Rated voltage	40 A	20 A	40 A
Holding time 1A	2 s typique	adjustable from 10 s to 24 H (battery depending)	
Holding time for maximum current	100 ms typique	adjustable from 10 s to 30 mn (battery depending)	adjustable from 10 to 10 mn (battery depending)
Certifications	UL (in progress), cCSAus, CB scheme, CE		
Dimensions (mm)	85x140x146	86x175x143	86x175x143
Fixing (mm)	DIN rail 35x7.5 or 35x15 (1)		
References Control module	ABL8BUF24400	ABL8BBU24200	ABL8BBU24400
References battery	3,2AH (2)	ABL8BPK24A03	ABL8BPK24A03
	7AH (2)	ABL8BPK24A07	ABL8BPK24A07
	12AH (2)	ABL8BPK24A12	ABL8BPK24A12

(1) Battery module except 7AH and 12AH. For battery module 3.2AH with ABL1A02 kit.

(2) Battery to be chosen according to the graph page 6/2



### Optimums, regulated switch mode

100...240 VAC			
24 V		12 V	48 V
72 W / 3 A	120 W / 5 A	60 W / 5 A	144 W / 2.5 A
Auto		Auto or manual	
No		Yes	
cULus, cCSAus, TUV, CE, C-Tick			
27x120x120		54x120x120	
DIN rail 75x7.5, 35x7.5 or 35x15			
<b>ABL8REM24030</b>	<b>ABL8REM24050</b>	<b>ABL7RP1205</b>	<b>ABL7RP4803</b>



### Universal, regulated switch mode with automatic or manual reset

100...120 VAC and 200...240 VAC	3 x 380...500 VAC	
24 V		
480 W / 20 A	960 W / 40 A	
1.5 In during 4 s		
Yes		
Yes		
UL (in progress), cCSAus, CB scheme, CE		
145x140x143	95x155x143	165x155x143
DIN rail 35x7.5 or 35x15		
<b>ABL8RPM24200</b>	<b>ABL8WPS24200</b>	<b>ABL8WPS24400</b>

### Type of module

### Converters DC/DC

<b>Compatibility</b>	Output connection of Universal power supplies ABL8RPS24... and ABL8WPS24...	
<b>Rated output voltage</b>	5 V	12 V
<b>Rated output current</b>	6 A	2 A
<b>Certifications</b>	UL (in progress), cCSAus, CB scheme, CE	
<b>Dimensions (mm)</b>	44x140x146	
<b>Fixing (mm)</b>	DIN rail 35x7.5 or 35x15	
<b>References</b>	<b>ABL8DCC05060</b>	<b>ABL8DCC12020</b>

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Type of module	Redundancy power supplies solutions
<b>Compatibility</b>	Connection of 2 power supplies inputs up to 20 A (1 power supply 40A)
<b>Rated output voltage</b>	24 V
<b>Rated output current</b>	40 A
<b>Certifications</b>	UL (in progress), cCSAus, CB scheme, CE
<b>Dimensions (mm)</b>	44x140x146
<b>Fixing (mm)</b>	DIN rail 35x7.5 ou 35x15
<b>References</b>	<b>ABL8RED24400</b>

Type of module	Starter protection solution
<b>Compatibility</b>	Output connection of Universal power supplies ABL8RPS24... and ABL8WPS24...
<b>Rated output current</b>	10A par voie
<b>Calibres</b>	1 / 2.5 / 4 / 5 / 7 / 8 / 10 A
<b>Nombre de voies</b>	4
<b>Relais de défaut</b>	Yes
<b>Coupure manuelle (1 par voie)</b>	Two-pole
<b>Certifications</b>	UL (in progress), cCSAus, CB scheme, CE
<b>Dimensions (mm)</b>	71x109x110
<b>Fixing (mm)</b>	DIN rail 35x7.5 or 35x15 or on panel mount by screw
<b>References</b>	<b>ABL8PRP24100</b>



Type of power supply		Dedicated, regulated switch mode					
Input voltage		85...264 VAC				85...132 VAC / 170...264 VAC	
Output voltage		12 VDC	24 VDC		24 VDC		
Power / rated current		60 W / 5 A	100 W / 8.3 A	60 W / 2.5 A	100 W / 4.2 A	150 W / 6.2 A	240 W / 10 A
Certifications		UL, c CSA us, CE, Ctick					
Dimensions WxDxH (mm)		150x38x98	200x38x98	150x38x98	200x38x98	200x50x98	200x65x98
Fixing (mm)		Panel mount by scrow, by bracket ABL1A01 (1) , on DIN rail 35mm by panel ABL1A02 (1).					
References	Without filter	ABL1REM12050	-	ABL1REM24025	ABL1REM24042	ABL1REM24062	ABL1REM24100
	With filter (2)	-	ABL1RPM12083	-	ABL1RPM24042	ABL1RPM24062	ABL1RPM24100

(1) has to order separately.

(2) Anti harmonic IEC/EN 61000-3-2

## Filtered rectified



Type of power supply		Filtered rectified single-phase or two-phase							
Input voltage		215/230/245 V or 385/400/415 VAC							
Rated output voltage		24 V							
Certifications		cULus, ENEC							
Rated power / Rated current		12 W / 0.5 A	24 W / 1 A	48 W / 2 A	96 W / 4 A	144 W / 6 A	240 W / 10 A	360 W / 15 A	480 W / 20 A
Dimensions (mm)		87x124x108	87x124x108	87x142x108	87x165x108	123x153x153	123x185x153	135x185x138	175x215x128
Fixing (mm)		DIN rail 35x7.5 or 35x15 or on panel mount by screw				On panel mount by screw			
References		ABL8FEQ24005	ABL8FEQ24010	ABL8FEQ24020	ABL8FEQ24040	ABL8FEQ24060	ABL8FEQ24100	ABL8FEQ24150	ABL8FEQ24200



Type of power supply		Filtered rectified three-phase				
Input voltage		3x 380 / 400 / 420 V				
Rated output voltage		24 V				
Certifications		cULus, ENEC				
Rated power / Rated current		240 W / 10 A	480 W / 20 A	720 W / 30 A	960 W / 40 A	1440 W / 60 A
Dimensions (mm)		185x190x78	220x215x104	240x252x108	310x310x140	310x310x154
Fixing (mm)		On panel mount by screw				
References		ABL8TEQ24100	ABL8TEQ24200	ABL8TEQ24300	ABL8TEQ24400	ABL8TEQ24600

# Transformers



Type of transformer		Universal range, double winding operating temperature +60°C										
Rated input voltage		230/400 VAC (±15 V) 1-phase										
Certifications		cULus, ENEC										
Rated power / Rated current		25 VA	40 VA	63 VA	100 VA	160 VA	250 VA	320 VA	400 VA	630 VA	1000 VA	
Visualization		LED display of voltage presence at primary								Without		
Fixing (mm)		DIN rail 35x15 or on panel mount by screw						On panel mount by screw				
References		ABT7PDU*** <sup>(1)</sup>										
Rated output voltage		24/48 V	002B	004B	006B	010B	016B	025B	032B	040B	063B	100B
		115/230 V	002G	004G	006G	010G	016G	025G	032G	040G	063G	100G

(1) Complete the reference according to the power and voltage using the table below (example: ABL6TS02J)



Type of transformer		Optimum range, single winding operating temperature +50°C									
Rated input voltage		230/400 VAC (±15 V) 1-phase									
Certifications		UL									
Nominal power		25 VA	40 VA	63 VA	100 VA	160 VA	250 VA	400 VA	630 VA	1000 VA	
References		ABL6TS*** <sup>(1)</sup>									
Rated output voltage		24 V	02B	04B	06B	10B	16B	25B	40B	63B	100B
		115 V	02G	04G	06G	10G	16G	25G	40G	63G	100G
		230 V	02U	04U	06U	10U	16U	25U	40U	63U	100U

(1) Complete the reference according to the power and voltage using the table below (example: ABL6TS02J)



Type of transformer		Economy range, single winding operating temperature +40°C							
Rated input voltage		230 VAC (±15 V) 1-phase							
Certifications		Without							
Rated power / Rated current		40 VA	63 VA	100 VA	160 VA	250 VA	320 VA	400 VA	
References		ABT7ESM*** <sup>(1)</sup>							
Rated output voltage		24 V	004B	006B	010B	016B	025B	032B	040B

(1) Complete the reference according to the power and voltage using the table below (example: ABL6TS02J)