Phaseo
Power supplies & Transformers

Catalogue
January 2015

Schneider Electric

General contents

Power supplies and transformers Phaseo

Regulated switch mode power supplies ABL1REM/1RPM

60 to 240 W - Mounting on panel

Presentation

ABL1REM/1RPM Phaseo range regulated switch mode power supplies are specially designed to provide the d.c. voltage necessary for electrical equipment operating on a safety extra low voltage (SELV). Split into two ranges, they are able to meet the needs encountered in standard commercial machines.
These single-phase power supplies, with or without anti-harmonic distortion filter, conform to world-wide standards. Switch mode technology guarantees the quality of the output current with regulation below 3%.
As machine components, **ABL1REM/1RPM** Phaseo range power supplies must be easy to install; only setting-up may vary from one application to another. The ABL1 range has been specially designed for machine manufacturers.

ABL1REM/1RPM regulated switch mode power supplies are totally electronic and regulated. They provide the following benefits:
- A wide input voltage range from 85 to 264 V ∿ and 120 to 370 V ⎓ (not indicated on the product).
- Products with anti-harmonic distortion input filter.
- A high degree of output voltage stability, adjustable by potentiometer.
- Built-in thermal overload protection.
- Conformity to world-wide standards.
- Conformity to standard EN 55022 class B.
- UL 508, CSA and TÜV certifications.
- Overload and short-circuit protection.
- Considerably reduced weight.
- Identical mounting accessories for each model.

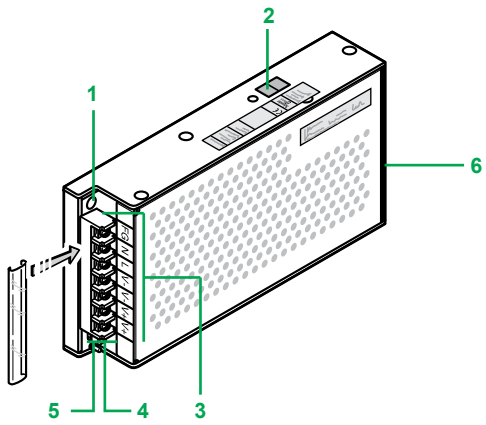
ABL1 power supplies for electrical equipment are split into two ranges :
- **ABL1REM**, single-phase:
  - 60 W for the 12 V ⎓ version,
  - 60 W, 100 W, 150 W and 240 W for the 24 V ⎓ versions.
- **ABL1RPM**, single-phase with anti-harmonic distortion filter:
  - 100 W for the 12 V ⎓ version,
  - 100 W, 150 W and 240 W for the 24 V ⎓ versions.

Electromagnetic compatibility

Levels of conducted and radiated emissions are defined in standards EN 55011 and EN 55022.
The products in the ABL1 range are class B and can be used without any restrictions due to their low emissions.

Behaviour in the event of short-circuits

ABL1 power supplies are equipped with electronic and thermal overload protection. This protection resets itself automatically on elimination of the fault, which avoids having to take any action or change a fuse.



Description

ABL1REM/1RPM regulated switch mode power supplies comprise:
1. Two fixing holes for M4 x 20 screws.
2. A 115/230 V input voltage selector (on 150 W and 240 W versions only).
3. A 4 mm² screw clamp terminal block for connection of the AC input voltage and DC output voltage.
4. A green LED indicating presence of the d.c. output voltage.
5. An output voltage adjustment potentiometer (± 10 %).
6. A removable, transparent, clip-on cover.

Power supplies and transformers Phaseo

Regulated switch mode power supplies ABL1REM/1RPM

60 to 240 W - Mounting on panel

Selection of protection for the power supply primary

Type of mains supply / Type of protection (2 poles protected)	∼ 115 V single-phase			∼ 230 V single-phase		
	Thermal-magnetic circuit-breaker		gG fuse	Thermal-magnetic circuit-breaker		gG fuse
	GB2 (IEC) *(1)*	C60N (IEC) C60N (UL)		GB2 (IEC) *(1)*	C60N (IEC) C60N (UL)	
ABL1REM12050	GB2DB07	24517	2 A	GB2DB07	24517	2 A
ABL1REM24025	GB2DB07	24517	2 A	GB2DB07	24517	2 A
ABL1RPM12083	GB2DB07	24517	2 A	GB2DB07	24517	2 A
ABL1REM24042	GB2DB07	24517	2 A	GB2DB07	24517	2 A
ABL1RPM24042	GB2DB07	24517	2 A	GB2DB07	24517	2 A
ABL1REM24062	GB2DB07	24517	2 A	GB2DB08	24518	4 A
ABL1RPM24062	GB2DB07	24517	2 A	GB2DB08	24518	4 A
ABL1REM24100	GB2DB08	24518	4 A	GB2DB10	17454	6 A
ABL1RPM24100	GB2DB08	24518	4 A	GB2DB10	17454	6 A

(1) Pending UL certification.

ABL1REM24025

ABL1R●M24042

ABL1R●M24062

ABL1R●M24100

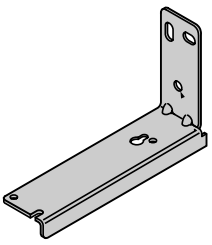
References

Regulated switch mode power supplies: ABL1REM Phaseo range

Input voltage 47…63 Hz	Output voltage	Nominal power	Nominal current	Auto-protect reset	Conforming to standard IEC/EN 61000-3-2	Reference	Weight kg/*lb*
100…240 V ∼ *(1)* single-phase wide range	12 V ⎓	60 W	5 A	Automatic	No	**ABL1REM12050**	0.440/ *0.970*
	24 V ⎓	60 W	2.5 A	Automatic	No	**ABL1REM24025**	0.440/ *0.970*
		100 W	4.2 A	Automatic	No	**ABL1REM24042**	0.640/ *1.411*
100...120 V ∼ 200...240 V ∼ *(2)* single-phase	24 V ⎓	150 W	6.2 A	Automatic	No	**ABL1REM24062**	0.730/ *1.609*
		240 W	10 A	Automatic	No	**ABL1REM24100**	0.880/ *1.940*

Regulated switch mode power supplies: ABL1RPM Phaseo range

Input voltage 47…63 Hz	Output voltage	Nominal power	Nominal current	Auto-protect reset	Conforming to standard IEC/EN 61000-3-2	Reference	Weight kg/*lb*
100…240 V ∼ *(1)* single-phase wide range	12 V ⎓	100 W	8.3 A	Automatic	Yes	**ABL1RPM12083**	0.640/ *1.411*
	24 V ⎓	100 W	4.2 A	Automatic	Yes	**ABL1RPM24042**	0.640/ *1.411*
100...120 V ∼ 200...240 V ∼ *(2)* single-phase	24 V ⎓	150 W	6.2 A	Automatic	Yes	**ABL1RPM24062**	0.970/ *2.138*
		240 W	10 A	Automatic	Yes	**ABL1RPM24100**	1.230/ *2.712*



ABL1A01

Mouting accessories

Description	For power supplies	Sold in lots of	Unit reference	Weight kg/*lb*
Reversible mounting bracket	For the mounting on the back of cabinet of ABL1R●M●●●●● power supply	5	**ABL1A01**	0.085/ *0.187*
Clip-on mounting plate for ⊔ 35 mm mounting rail	- ABL1REM12050/24025: the plate mounting on ⊔ requires one mounting plate - ABL1RPM12083 and ABL1R●M24042/24062/24100: the plate mouting on ⊔ requires 2 mounting plates - ABL1R●M●●●●●: the mounting on the back of cabinet on the ⊔ rail requires one mounting plate	5	**ABL1A02**	0.035/ *0.077*

(1) Compatible input voltage ⎓ 120…370 V not indicated on the product.
(2) Compatible input voltage ⎓ 180…370 V not indicated on the product.

Power supplies and transformers Phaseo

Regulated switch mode power supplies ASIABL

Power supplies for AS-Interface cabling system

Power supplies for AS-Interface cabling system

Consistent with the standard Phaseo line, the range of **ASIABL** power supplies is designed to deliver a ⎓ voltage, as required by AS-Interface cabling systems. Three versions are available to meet all needs encountered in industrial applications, in enclosures, cells or floor-standing enclosures. These single-phase, electronic, switch mode power supplies guarantee the quality of the output current, in accordance with the electrical characteristics and conforming to standard EN 50295.

ASIABLB3002

ASIABLB300●

Operating on a 100 to 240 V ∿ supply, this power supply delivers a voltage of 30 V ⎓. Available in 2.4 and 4.8 A ratings, the outgoing terminal block allows the cable to be connected separately to the AS-Interface interface modules and to the AS-Interface master. Input and output LEDs allow fast and continuous diagnostics.

ASIABLD3004

ASIABLD300●

Operating on a 100 to 240 V ∿ supply, this power supply delivers a voltage of 30 V ⎓. Available in 2.4 and 4.8 A ratings, it allows diagnosis and management of earth faults on AS-Interface interface modules. In the event of an earth fault, the Phaseo power supply stops dialogue on the AS-Interface cabling system and puts the installation in a fallback condition. Restarting is only possible after deliberate acknowledgement of the fault. Two inputs/outputs enable dialogue with a processing unit. The outgoing terminal block is used to connect the AS-Interface cable separately to the interface modules and master modules. Input, output and earth fault LED's allow fast and continuous diagnostics.

ASIABLM3024

ASIABLM3024

Operating on a 100 to 240 V ∿ supply, this product provides two separate power supplies, which are totally independent in the way they operate.
Two output voltages - 30 V/2.4 A (AS-Interface line supply) and 24 V/3 A - are available, so making it possible to supply the control equipment without an additional power supply. Input and output LEDs allow fast and continuous diagnostics.

Power supplies and transformers Phaseo

Regulated switch mode power supplies ASIABL

Power supplies for AS-Interface cabling system

Selection of protection on the power supply primaries

Type of mains supply	∿ 115 V single-phase			∿ 230 V single-phase		
Power supply	**Thermal-magnetic circuit-breaker** *(1)*		**Gg fuse**	**Thermal-magnetic circuit-breaker** (2-pole)		**Gg fuse**
ASIABLB3002	GB2●B07	MG24517 *(2)*	2 A	GB2DB06	MG24516 *(2)*	2 A
ASIABLB3004	GB2●B08	MG24518 *(2)*	4 A	GB2DB07	MG17453 *(2)*	2 A
ASIABLD3002	GB2●B07	MG24517 *(2)*	2 A	GB2DB06	MG24516 *(2)*	2 A
ASIABLD3004	GB2●B08	MG24518 *(2)*	4 A	GB2DB07	MG17453 *(2)*	2 A
ASIABLM3024	GB2●B07	MG24517 *(2)*	2 A	GB2DB06	MG17453 *(2)*	2 A

(1) Single-phase protection, replace ● by C; 2-pole protection, replace ● by D.
(2) UL certified circuit breaker.

References

ASIABL●3002

Input voltage	Secondary			Auto-protect reset	Earth fault detection	Reference	Weight
	Output voltage	**Nominal power**	**Nominal current**				**kg/*lb***
Single phase (N-L1) **or 2-phase** (L1-L2)							
∿ **100…240 V** - 15 %, + 10 % 50/60 Hz	⎓ 30 V	72 W	2.4 A	Auto	No	**ASIABLB3002**	0.800/ *1.764*
		144 W	4.8 A	Auto	No	**ASIABLB3004**	1.300/ *2.866*
		72 W	2.4 A	Auto	Yes	**ASIABLD3002**	0.800/ *1.764*
		144 W	4.8 A	Auto	Yes	**ASIABLD3004**	1.300/ *2.866*
	⎓ 30 V	72 W	2.4 A	Auto	No	**ASIABLM3024**	1.300/ *2.866*
	⎓ 24 V	72 W	3 A				

Power supplies and transformers Phaseo

Filtered rectified power supplies ABL8FEQ/8TEQ

12 to 1440 W - Mounting on panel or rail

ABL8FEQ24040

ABL8FEQ●●●●●

ABL8TEQ24●00

ABL8FEQ/8TEQ power supplies

The **ABL8FEQ/8TEQ** range of power supplies is designed to provide the DC voltage necessary for the control circuits of automation system equipment. Comprising two families, this range meets the needs encountered in industrial, commercial and residential applications. With phase-to-neutral or three-phase connection, of the conventional type with rectifier, they provide a quality of output current that is suitable for the loads supplied and compatible with the line supply available in the equipment. Clear guidelines are given for selecting protection devices which are often used with them, and thus a comprehensive solution is provided.

Filtered rectified power supplies

Filtered rectified power supplies are built using a SELV transformer (Safety Extra Low Voltage) equipped with a bridge rectifier and smoothing capacitors.
With no regulation system, and of simple and rugged construction, their output voltage will withstand line voltage variations and load variations while remaining within the range defined in standards IEC/EN 61131-2.
These power supplies are split into two families:

- The **ABL8FEQ** family, with phase-to-neutral or phase-to-phase connection, rectified and filtered, enables connection to European 230/400 V line supplies. Power supplies from 0.5 A to 4 A are available for direct mounting on a ⊐ rail.
- The **ABL8TEQ** family, with three-phase connection, filtered and rectified, is particularly suitable where a high power level is required for controlling actuators and preactuators. This is especially true for “24 V ⎓” equipment, or for pilot operation of DC valves and solenoid valves.

Selection of power supplies

Quality of the line supply

Rectified power supplies provide a non-regulated voltage, sensitive to load and line supply fluctuations. They can only be used on good-quality line supplies, with fluctuations limited to - 10%…+ 10% of the nominal value.
Graphs showing the output voltage as a function of the current, the load and the input voltage for **ABL8FEQ** and **ABL8TEQ** supplies are given on our web site www.schneider-electric.com.
If the quality of the line supply is not suitable for a rectified power supply, a regulated supply must be used.

Harmonic pollution (power factor)

By design, **ABL8FEQ** and **ABL8TEQ** rectified power supplies consume very little harmonic current; they meet the requirements of standard IEC/EN 61000-3-2 and can therefore be connected directly to public distribution systems.

Behavior in the event of short-circuits

In the event of an overload or short-circuit, rectified power supplies need a downstream fuse or circuit-breaker to prevent their destruction. **ABL8FEQ** models up to 6 A are fitted with a 5 x 20 mm glass fuse and do not need any external downstream protection.

Power supplies and transformers Phaseo

Filtered rectified power supplies ABL8FEQ/8TEQ

12 to 1440 W - Mounting on panel or rail

Selection

ABL8TEQ power supplies: protection of the primary and secondary voltages

Type of line supply		400 V ∼ 3-phase, primary voltage				24 V ⎓, secondary voltage	
Type of protection	Nominal power	3-pole thermal-magnetic circuit-breaker		UL listed FNQ type fuse	aM type fuse	gC type fuse	T type fuse
		TeSys	C60N *(1)*				
ABL8TEQ24100	240 W	GV2RT04	24532	0.8 A	1 A	12 A	12 A
ABL8TEQ24200	480 W	GV2RT06	17470	1.5 A	1 A	25 A	25 A
ABL8TEQ24300	720 W	GV2RT07	24533	2 A	2 A	40 A	–
ABL8TEQ24400	960 W	GV2RT07	24534	3 A	2 A	50 A	–
ABL8TEQ24600	1440 W	GV2RT08	24535	4 A	4 A	80 A	–

ABL8FEQ power supplies: protection of the primary and secondary voltages

Type of line supply		400 V ∼ single-phase, primary voltage				230 V ∼ single-phase, primary voltage			
Type of protection	Nominal power	3-pole thermal-magnetic circuit-breaker		UL listed FNQ type fuse	aM type fuse	Thermal-magnetic circuit-breaker		UL listed MDL type fuse	aM type fuse
		TeSys	C60N 2 poles *(1)*			TeSys	C60N 1 pole *(1)*		
ABL8FEQ24005	12 W	GB2DB05	17451	0.1 A	0.25 A	GB2●●05	17421	0.125 A	0.25 A
ABL8FEQ24010	24 W	GB2DB05	17451	0.15 A	0.25 A	GB2●●05	17421	0.2 A	0.25 A
ABL8FEQ24020	48 W	GB2DB05	17451	0.3 A	0.25 A	GB2●●05	17421	0.5 A	0.25 A
ABL8FEQ24040	96 W	GB2DB06	24516	0.5 A	0.5 A	GB2●●06	24500	1 A	0.5 A
ABL8FEQ24060	144 W	GB2DB06	24516	1 A	0.5 A	GB2●●07	17422	1.25 A	1 A
ABL8FEQ24100	240 W	GB2DB06	24516	1.25 A	1 A	GB2●●07	24501	2 A	1 A
ABL8FEQ24150	360 W	GB2DB07	24517	2 A	1 A	GB2●●08	24502	3 A	2 A
ABL8FEQ24200	480 W	GB2DB07	24517	2.5 A	1 A	GB2●●09	24503	4 A	2 A

Type of line supply		24 V ⎓, secondary voltage	
Type of protection	Nominal power	gC type fuse	T type fuse
ABL8FEQ24005	12 W	–	0.5 A (internal fuse)
ABL8FEQ24010	24 W	–	1 A (internal fuse)
ABL8FEQ24020	48 W	–	2 A (internal fuse)
ABL8FEQ24040	96 W	–	4 A (internal fuse)
ABL8FEQ24060	144 W	–	6.3 A (internal fuse)
ABL8FEQ24100	240 W	12 A	12 A
ABL8FEQ24150	360 W	20 A	20 A
ABL8FEQ24200	480 W	25 A	25 A

(1) UL certified circuit-breaker

References

ABL8FEQ24●●●

ABL8TEQ24●00

Input voltage	Secondary				Reference	Weight
	Output voltage	Nominal power	Output current	Protection by 5 x 20 fuse		kg/*lb*
Rectified and filtered power supplies						
Single-phase (N-L1) or phase-to-phase (L1-L2) connection						
230/400 V ∼ ±15 V 50/60 Hz	24 V ⎓	12 W	0.5 A	Yes	**ABL8FEQ24005**	1.280/*2.822*
		24 W	1 A	Yes	**ABL8FEQ24010**	1.300/*2.866*
		48 W	2 A	Yes	**ABL8FEQ24020**	2.200/*4.850*
		96 W	4 A	Yes	**ABL8FEQ24040**	2.900/*6.393*
		144 W	6 A	Yes	**ABL8FEQ24060**	4.940/*10.891*
		240 W	10 A	No	**ABL8FEQ24100**	7.660/*16.887*
		360 W	15 A	No	**ABL8FEQ24150**	8.820/*19.445*
		480 W	20 A	No	**ABL8FEQ24200**	13.220/*29.145*
3-phase connection (L1-L2-L3)						
400 V ∼ ± 20 V 50/60 Hz	24 V ⎓	240 W	10 A	No	**ABL8TEQ24100**	4.720/*10.406*
		480 W	20 A	No	**ABL8TEQ24200**	9.900/*21.826*
		720 W	30 A	No	**ABL8TEQ24300**	13.000/*28.660*
		960 W	40 A	No	**ABL8TEQ24400**	17.500/*38.581*
		1440 W	60 A	No	**ABL8TEQ24600**	26.500/*58.422*

Marking accessory

Designation	Size	Order in multiples of	Unit reference	Weight kg/*lb*
Self-adhesive marker tag holder	20 x 10 mm	50	**AR1SB3**	0.010/*0.022*

Power supplies and transformers Phaseo
Transformers
ABL6TS, ABT7

Presentation

The Phaseo **ABL6TS** and **ABT7** single-phase transformers offer is designed to supply control circuits in electrical equipment from a 230 V ∿ or 400 V ∿ supply (depending on the model) at 50 or 60 Hz. ± 15 V connectors at the primary ensure adaptation to the actual values of the supply networks to which they are connected.

Transformers 230 V, Single winding: ABT7ESM

This range of simplified single-winding transformers is primarily designed for repetitive applications and offers the following as standard:
- 230 V ∿ ± 15 V input voltage
- 24 V ∿ output voltages
- Panel mounting using 4 screws
- Operating temperature of 40°C

Transformers 230/400 V, Single winding: ABL6TS

The following characteristics demonstrate the suitability of this tried and tested range of single-winding transformers for standard applications:
- 230 V/400 V ∿ ± 15 V input voltage
- 12 V, 24 V, 115 V or 230 V ∿ output voltage
- Panel mounting, using 4 screws (or clip-on ⊔ rail-mounting option available depending on the model)
- Operating temperature of 50°C
- cURus certifications

Transformers 230/400 V, Double winding: ABT7PDU

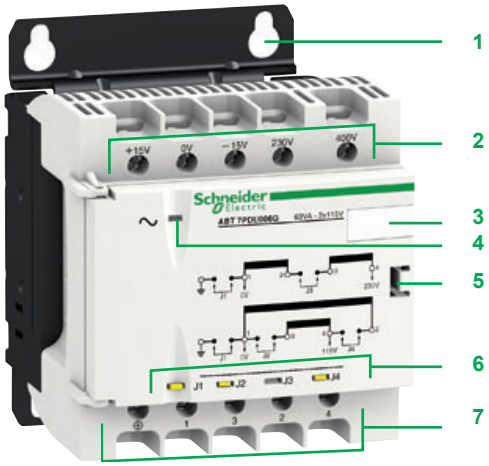
This range of transformers with double winding features a particularly innovative design and offers high-level characteristics (depending on the model) such as:
- 230 V/400 V ∿ ± 15 V input voltage
- 2 x 115 V or 2 x 24 V ∿ output voltage
- Clip-on ⊔ rail mounting (depending on the model) or panel mounting (using 4 screws)
- Series or parallel connection of secondary winding and grounding via internal jumpers
- LED indicator
- Operating temperature of 60°C
- cURus, ENEC certifications

Those components are concealed behind a plastic cover making it easier to integrate the Phaseo transformers in control cabinets.

Protection

The transformers can be protected against short-circuits by means of fuses or thermal-magnetic circuit-breakers mounted on the secondary.
For operation in compliance with UL standards, short-circuit protection must be achieved using fuses (UL approved) mounted on the primary.
Where the control circuit is isolated from the ground (IT system), a leakage detector will indicate any accidental ground faults.

Description



ABT7PDU002●…7PDU032●

1 Mounted using 4 screws or, depending on the model in the ABT7PDU range, by clipping on a 35 mm ⊔ rail
2 Screw terminals with ± 15 V connectors for connection of the AC input voltage
3 Clip-on marker tag or self-adhesive marker tag holder **AR1SB3**
4 LED (green) indicating presence of input voltage (depending on the model in the ABT7PDU range)
5 Access to the jumpers for selecting the secondary connection (opened using a screwdriver)
6 Windows (depending on the model in the ABT7PDU range) for viewing the connection via jumpers of the:
- □ 0 V to ground (J1 jumper)
- □ Series connection, totally freeing up the “customer” secondary wiring capacity (J3 jumper)
- □ Parallel connection, totally freeing up the “customer” secondary wiring capacity (J2 and J4 jumpers)

7 Screw terminals for connection of the AC output voltage

Power supplies and transformers
Phaseo
Transformers
ABL6TS, ABT7

Selection

ABL6TS and **ABT7** transformers are characterized by the apparent nominal power they can supply continuously. However, they are also designed to supply, when necessary, significantly higher powers, such as contactor inrush peaks.

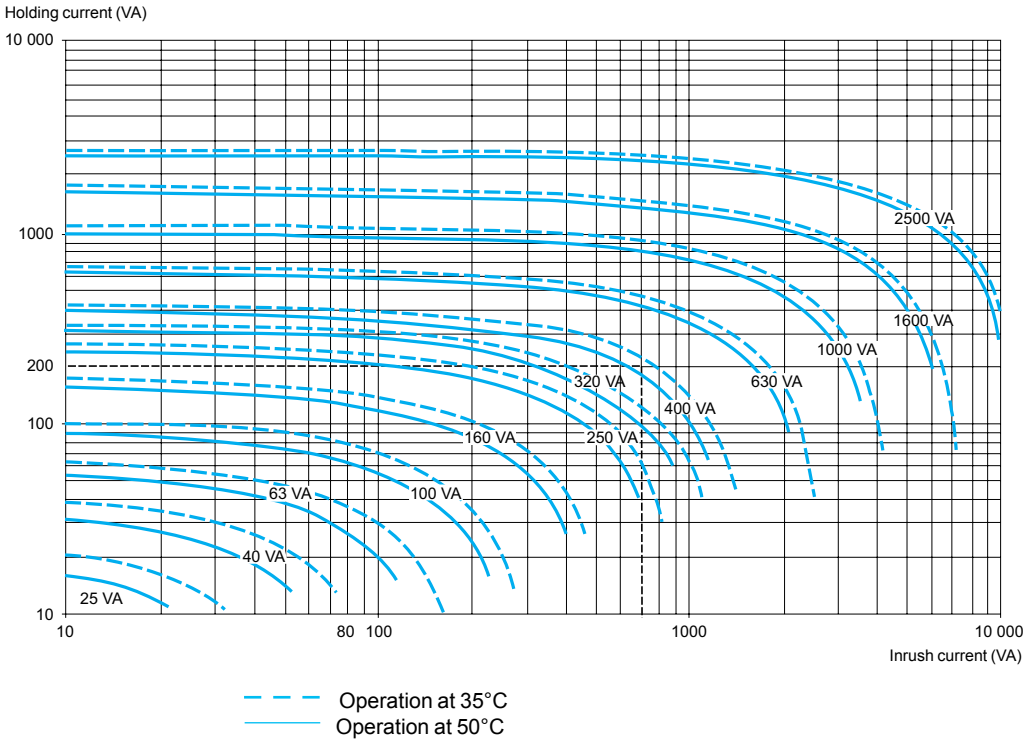
Contactor inrush peaks can reach 10 to 20 times the required holding current. This leads to the transformer being oversized in relation to the continuous power it has to supply. The transformer must be sized so that the voltage drop at its terminals, caused by the inrush, remains with the permissible limits for the contactor to close properly.

The two power values that need to be taken into account to determine which transformer rating to use are therefore:
- The continuous power the transformer has to supply
- The maximum inrush power it has to provide

In practice, only the sum of the holding currents and the contactor inrush current need to be considered.

For **ABL6TS** transformers, the graph below can be used to select the appropriate rating according to these two currents. This gives a maximum voltage drop of 5% at the moment of inrush, compatible with correct operation of the entire installation. However, these transformers have been designed for continuous operation at nominal load and at an ambient temperature of 50°C. A reduction in the ambient temperature may uprate the transformer, which, in some cases, allows a lower rating to be used. The graph below has been drawn up for ambient temperatures of 35…50°C.

The inrush values of the contactor coils are given on the contactor control circuit characteristics pages.



Example: A device with a total holding current of 200 VA and inrush current of the contactor of 700 VA can be supplied by a 630 VA transformer if it is used at an ambient temperature of 50°C. A 400 VA transformer is sufficient if the ambient temperature is 35°C.

Power supplies and transformers Phaseo
Transformers
ABT7

Recommended protection for the primary

Protection on the primary by fuse or thermal magnetic circuit breaker

Transformer		230 V ∼ single-phase input voltage			
Reference	Power	MDL fuses UL Listed *(1)*	aM fuses	TeSys GV2RT	Acti9 IC60 *(2)*
ABT7ESM004B	40 VA	0.3 A	0.25 A	GV2RT03	0.5 A D curve *(3)*
ABT7ESM006B	63 VA	0.4 A	0.5 A	GV2RT03	0.5 A D curve *(3)*
ABT7ESM010B	100 VA	0.5 A	0.5 A	GV2RT04	0.5 A D curve
ABT7ESM016B	160 VA	1 A	1 A	GV2RT05	1 A D curve
ABT7ESM025B	250 VA	1.25 A	2 A	GV2RT06	2 A D curve *(3)*
ABT7ESM032B	320 VA	1.5 A	2 A	GV2RT06	2 A D curve *(3)*
ABT7ESM040B	400 VA	2 A	2 A	GV2RT07	3 A D curve *(3)*

Recommended protection for the secondary

Protection on the secondary by fuses of thermal circuit breaker

Transformer		24 V ∼ secondary			
Reference	Power	gG fuse *(1)*	aM fuses	TeSys GB2 *(1)*	Acti9 IC60 *(2)*
ABT7ESM004B	40 VA	1 A	1 A	GB2CD07	2 A C curve
ABT7ESM006B	63 VA	2 A	2 A	GB2CD08	3 A C curve
ABT7ESM010B	100 VA	4 A	4 A	GB2CD09	4 A C curve
ABT7ESM016B	160 VA	6 A	6 A	GB2CD12	6 A C curve
ABT7ESM025B	250 VA	10 A	10 A	GB2CD16	10 A C curve
ABT7ESM032B	320 VA	12 A	12 A	GB2CD20	16 A C curve
ABT7ESM040B	400 VA	16 A	16 A	GB2CD21	16 A C curve

(1) For operation in compliance with UL.
(2) Check your local catalogue for the exact reference.
For installation in North America, please select a UL489 compliant circuit breaker.
(3) Protection on the secondary is necessary.

Power supplies and transformers
Phaseo
Transformers
ABT7

Recommended protection for the primary

Protection on the primary by fuse or thermal magnetic circuit breaker

Transformer		230 V ∼ single-phase					400 V ∼ single-phase				
Reference	**Power**	**MDL fuses UL listed** *(1)*	**aM fuses**	**TeSys GB2** *(1)*	**TeSys GV2RT**	**Acti9 IC60** *(2)*	**MDL fuses UL Listed** *(1)*	**aM fuses**	**TeSys GB2** *(1)*	**TeSys GV2RT**	**Acti9 IC60** *(2)*
ABT7PDU002B/G	25 VA	0.2 A	0.25 A	–	–	–	0.25 A	0.16 A	–	–	–
ABT7PDU004B/G	40 VA	0.3 A	0.25 A	GB2DB05	GV2RT03	0.5 A D curve *(3)*	0.25 A	0.16 A	–	–	–
ABT7PDU006B/G	63 VA	0.5 A	0.5 A	GB2DB06	GV2RT04	0.5 A D curve *(3)*	0.25 A	0.25 A	–	–	–
ABT7PDU010B/G	100 VA	0.5 A	0.5 A	GB2DB06	GV2RT04	1 A D curve *(3)*	0.3 A	0.5 A	GB2DB05	GV2RT03	0.5 A D curve
ABT7PDU016B/G	160 VA	1 A	1 A	GB2DB07	GV2RT05	1 A D curve *(3)*	0.5 A	0.5 A	GB2DB06	GV2RT04	1 A D curve
ABT7PDU025B/G	250 VA	1.25 A	2 A	GB2DB07	GV2RT06	2 A D curve *(3)*	0.75 A	1 A	GB2DB06	GV2RT05	1 A D curve
ABT7PDU032B/G	320 VA	1.5 A	2 A	GB2DB07	GV2RT07	2 A D curve	1 A	1 A	GB2DB06	GV2RT05	1 A D curve
ABT7PDU040B/G	400 VA	2 A	2 A	GB2DB09	GV2RT07	3 A D curve *(3)*	1.25 A	2 A *(3)*	GB2DB07	GV2RT06	2 A D curve
ABT7PDU063B/G	630 VA	3 A	4 A	GB2DB12 *(3)*	GV2RT08	6 A D curve *(3)*	2 A	2 A	GB2DB09 *(3)*	–	4 A D curve *(3)*
ABT7PDU100B/G	1000 VA	5 A	6 A	GB2DB16 *(3)*	GV2RT10	10 A D curve *(3)*	3 A	4 A *(3)*	GB2DB12 *(3)*	–	6 A D curve *(3)*
ABT7PDU160B/G	1600 VA	8 A	8 A	GB2DB21 *(3)*	GV2RT14	16 A D curve *(3)*	4 A	6 A *(3)*	GB2DB14 *(3)*	GV2RT10	10 A D curve *(3)*
ABT7PDU250B/G	2500 VA	–	12 A	–	–	25 A D curve *(3)*	7 A	8 A *(3)*	GB2DB21 *(3)*	GV2RT14	16 A D curve *(3)*

Recommanded protection for the secondary

Protection on the secondary by fuses of thermal circuit breaker

Transformer		24 V ∼ secondary				48 V ∼ secondary			
Reference	**Power**	**gG fuse** *(1)*	**aM fuses**	**TeSys GB2** *(1)*	**Acti9 IC60** *(2)*	**gG fuse** *(1)*	**aM fuses**	**TeSys GB2** *(1)*	**Acti9 IC60** *(2)*
ABT7PDU002B	25 VA	1 A	1 A	GB2CD06	1 A C curve	0.5 A	0.5 A	GB2CD05	0.5 A C curve
ABT7PDU004B	40 VA	2 A	2 A	GB2CD07	2 A C curve	1 A	1 A	GB2CD06	1 A C curve
ABT7PDU006B	63 VA	2 A	2 A	GB2CD08	3 A C curve	1 A	1 A	GB2CD06	1 A C curve
ABT7PDU010B	100 VA	4 A	4 A	GB2CD09	4 A C curve	2 A	2 A	GB2CD07	2 A C curve
ABT7PDU016B	160 VA	6 A	6 A	GB2CD12	6 A C curve	2 A	2 A	GB2CD08	3 A C curve
ABT7PDU025B	250 VA	10 A	10 A	GB2CD16	10 A C curve	4 A	4 A	GB2CD10	6 A C curve
ABT7PDU032B	320 VA	12 A	12 A	GB2CD20	16 A C curve	6 A	6 A	GB2CD12	10 A C curve
ABT7PDU040B	400 VA	16 A	16 A	GB2CD21	16 A C curve	8 A	8 A	GB2CD14	10 A C curve
ABT7TDU063B	630 VA	25 A	25 A	–	25 A C curve	12 A	12 A	GB2CD20	16 A C curve
ABT7TDU100B	1000 VA	40 A	40 A	–	40 A C curve	20 A	20 A	GB2CD22	20 A C curve
ABT7TDU160B	1600 VA	63 A	63 A	–	63 A C curve	32 A	32 A	–	32 A C curve
ABT7TDU250B	2500 VA	100 A	100 A	–	–	50 A	50 A	–	50 A C curve

Transformer		115 V ∼ secondary				230 V ∼ secondary			
Reference	**Power**	**gG fuse** *(1)*	**aM fuses**	**TeSys GB2** *(1)*	**Acti9 IC60** *(2)*	**gG fuse** *(1)*	**aM fuses**	**TeSys GB2** *(1)*	**Acti9 IC60** *(2)*
ABT7PDU002G	25 VA	–	0.25 A	–	–	–	0.16 A	–	–
ABT7PDU004G	40 VA	0.5 A	0.5 A	GB2CD05	–	–	0.25 A	–	–
ABT7PDU006G	63 VA	0.5 A	0.5 A	GB2CD05	0.5 A C curve	–	0.25 A	–	–
ABT7PDU010G	100 VA	1 A	1 A	GB2CD05	1 A C curve	0.5 A	0.5 A	GB2CD06	0.5 A C curve
ABT7PDU016G	160 VA	1 A	1 A	GB2CD06	2 A C curve	0.5 A	0.5 A	GB2CD07	1 A C curve
ABT7PDU025G	250 VA	2 A	2 A	GB2CD06	2 A C curve	1 A	1 A	GB2CD07	1 A C curve
ABT7PDU032G	320 VA	2 A	2 A	GB2CD07	3 A C curve	1 A	1 A	GB2CD08	2 A C curve
ABT7PDU040G	400 VA	4 A	4 A	GB2CD07	4 A C curve	2 A	2 A	GB2CD08	2 A C curve
ABT7TDU063G	630 VA	4 A	4 A	GB2CD09	4 A C curve	2 A	2 A	GB2CD07	2 A C curve
ABT7TDU100G	1000 VA	8 A	8 A	GB2CD14	10 A C curve	4 A	4 A	GB2CD09	4 A C curve
ABT7TDU160G	1600 VA	12 A	12 A	GB2CD20	16 A C curve	6 A	6 A	GB2CD12	6 A C curve
ABT7TDU250G	2500 VA	20 A	20 A	GB2CD22	20 A C curve	10 A	10 A	GB2CD16	10 A C curve

(1) For operation in compliance with UL.
(2) Check your local catalogue for the exact reference. For installation in North America. please select a UL489 compliant circuit breaker.
(3) Protection on the secondary is necessary.

Power supplies and transformers
Phaseo
Transformers
ABL6TS

Recommended protection for the primary

Protection on the primary by fuse or thermal magnetic circuit breaker

Transformer		230 V ∼ single-phase input voltage					400 V ∼ single-phase input voltage				
Reference	Power	MDL fuses UL listed *(1)*	aM fuses	TeSys GB2 *(1)*	TeSys GV2RT	Acti9 IC60 *(2)*	MDL fuses UL Listed *(1)*	aM fuses	TeSys GB2 *(1)*	TeSys GV2RT	Acti9 IC60 *(2)*
ABL6TS02J	25 VA	0.18 A	0.16 A	–	–	–	0.25 A	0.16 A	–	–	–
ABL6TS04J	40 VA	0.25 A	0.25 A	GB2DB05	GV2RT03	0.5 A D curve *(3)*	0.25 A	0.16 A	–	–	–
ABL6TS06J	63 VA	0.37 A	0.5 A	GB2DB05	GV2RT03	0.5 A D curve *(3)*	0.25 A	0.25 A	–	–	–
ABL6TS10J	100 VA	0.5 A	0.5 A	GB2DB06	GV2RT04	1 A D curve *(3)*	0.3 A	0.5 A	GB2DB05	GV2RT03	0.5 A D curve
ABL6TS16J	160 VA	1 A	1 A	GB2DB07	GV2RT05	2 A D curve *(3)*	0.5 A	0.5 A	GB2DB06	GV2RT04	1 A D curve
ABL6TS25J	250 VA	1.25 A	2 A	GB2DB07	GV2RT06	2 A D curve *(3)*	0.75 A	1 A	GB2DB06	GV2RT05	1 A D curve

Recommanded protection for the secondary

Protection on the secondary by fuses of thermal circuit breaker

Transformer		12 V ∼ secondary			
Reference	Power	gG fuse *(1)*	aM fuses	TeSys GB2 *(1)*	Acti9 IC60 *(2)*
ABL6TS02J	25 VA	2 A	2 A	GB2CD07	2 A C curve
ABL6TS04J	40 VA	4 A	4 A	GB2CD08	3 A C curve
ABL6TS06J	63 VA	6 A	6 A	GB2CD10	6 A C curve
ABL6TS10J	100 VA	8 A	8 A	GB2CD14	10 A C curve
ABL6TS16J	160 VA	12 A	12 A	GB2CD20	16 A C curve
ABL6TS25J	250 VA	20 A	20 A	GB2CD22	20 A C curve

Recommended protection for the primary

Protection on the primary by fuse or thermal magnetic circuit breaker

Transformer		230 V ∼ single-phase input voltage					400 V ∼ single-phase input voltage				
Reference	Power	MDL fuses UL listed *(1)*	aM fuses	TeSys GB2 *(1)*	TeSys GV2RT	Acti9 IC60 *(2)*	MDL fuses UL Listed *(1)*	aM fuses	TeSys GB2 *(1)*	TeSys GV2RT	Acti9 IC60 *(2)*
ABL6TS02B	25 VA	0.18 A	0.16 A	–	–	–	0.25 A	0.16 A	–	–	–
ABL6TS04B	40 VA	0.25 A	0.25 A	GB2DB05	GV2RT03	0.5 A D curve *(3)*	0.25 A	0.16 A	–	–	–
ABL6TS06B	63 VA	0.37 A	0.5 A	GB2DB05	GV2RT03	0.5 A D curve *(3)*	0.25 A	0.25 A	–	–	–
ABL6TS10B	100 VA	0.5 A	0.5 A	GB2DB05	GV2RT04	1 A D curve *(3)*	0.3 A	0.5 A	GB2DB05	GV2RT03	0.5 A D curve
ABL6TS16B	160 VA	1 A	1 A	GB2DB06	GV2RT05	2 A D curve *(3)*	0.5 A	0.5 A	GB2DB06	GV2RT04	1 A D curve
ABL6TS25B	250 VA	1.25 A	2 A	GB2DB07	GV2RT06	2 A D curve *(3)*	0.75 A	1 A	GB2DB06	GV2RT05	1 A D curve
ABL6TS40B	400 VA	2 A	2 A	GB2DB09	GV2RT07	3 A D curve *(3)*	1.5 A	1 A	GB2DB07	GV2RT06	2 A D curve
ABL6TS63B	630 VA	3 A	4 A	GB2DB12	GV2RT08	6 A D curve *(3)*	2.5 A	2 A	GB2DB09	GV2RT07	3 A D curve
ABL6TS100B	1000 VA	5 A	6 A	GB2DB16	GV2RT10	10 A D curve *(3)*	3.5 A	4 A	GB2DB10	GV2RT08	6 A D curve
ABL6TS160B	1600 VA	8 A	8 A	GB2DB20	GV2RT14	16 A D curve *(3)*	5 A	4 A	GB2DB14	GV2RT10	10 A D curve
ABL6TS250B	2500 VA	–	12 A	GB2DB22	GV2RT16	20 A D curve *(3)*	7.5 A	8 A *(3)*	GB2DB20	GV2RT14	10 A D curve

Recommanded protection for the secondary

Protection on the secondary by fuses of thermal circuit breaker

Transformer		24 V ∼ secondary			
Reference	Power	gG fuse *(1)*	aM fuses	TeSys GB2 *(1)*	Acti9 IC60 *(2)*
ABL6TS02B	25 VA	1 A	1 A	GB2CD06	1 A C curve
ABL6TS04B	40 VA	1 A	1 A	GB2CD07	2 A C curve
ABL6TS06B	63 VA	2 A	2 A	GB2CD08	3 A C curve
ABL6TS10B	100 VA	4 A	4 A	GB2CD09	4 A C curve
ABL6TS16B	160 VA	6 A	6 A	GB2CD12	6 A C curve
ABL6TS25B	250 VA	10 A	10 A	GB2CD16	10 A C curve
ABL6TS40B	400 VA	16 A	16 A	GB2CD21	16 A C curve
ABL6TS63B	630 VA	25 A	25 A	–	25 A C curve
ABL6TS100B	1000 VA	40 A	40 A	–	40 A C curve
ABL6TS160B	1600 VA	63 A	63 A	–	63 A C curve
ABL6TS250B	2500 VA	100 A	100 A	–	–

(1) For operation in compliance with UL.
(2) Check your local catalogue for the exact reference. For installation in North America, please select a UL489 compliant circuit breaker.
(3) Protection on the secondary is necessary.

Power supplies and transformers
Phaseo
Transformers
ABL6TS

Recommended protection for the primary

Protection on the primary by fuse or thermal magnetic circuit breaker

Transformer		230 V ∼ single-phase input voltage					400 V ∼ single-phase input voltage				
Reference	**Power**	**MDL fuses UL listed** *(1)*	**aM fuses**	**TeSys GB2** *(1)*	**TeSys GV2RT**	**Acti9 IC60** *(2)*	**MDL fuses UL Listed** *(1)*	**aM fuses**	**TeSys GB2** *(1)*	**TeSys GV2RT**	**Acti9 IC60** *(2)*
ABL6TS02G	25 VA	0.18 A	0.16 A	–	–	–	0.25 A	0.16 A	–	–	–
ABL6TS04G	40 VA	0.25 A	0.25 A	GB2DB05	GV2RT03	0.5 A D curve *(3)*	0.25 A	0.16 A	–	–	–
ABL6TS06G	63 VA	0.37 A	0.5 A	GB2DB06	GV2RT03	0.5 A D curve *(3)*	0.25 A	0.25 A	–	–	–
ABL6TS10G	100 VA	0.5 A	0.5 A	GB2DB06	GV2RT04	1 A D curve *(3)*	0.3 A	0.5 A	GB2DB05	GV2RT03	0.5 A D curve
ABL6TS16G	160 VA	1 A	1 A	GB2DB07	GV2RT05	1 A D curve *(3)*	0.5 A	0.5 A	GB2DB06	GV2RT04	1 A D curve
ABL6TS25G	250 VA	1.25 A	2 A	GB2DB07	GV2RT06	2 A D curve *(3)*	0.75 A	1 A	GB2DB06	GV2RT05	1 A D curve
ABL6TS40G	400 VA	2 A	2 A	GB2DB09	GV2RT07	4 A D curve *(3)*	1.5 A	2 A *(3)*	GB2DB07	GV2RT06	2 A D curve
ABL6TS63G	630 VA	3 A	4 A	GB2DB12	GV2RT08	6 A D curve *(3)*	2.5 A	4 A *(3)*	GB2DB08	GV2RT07	3 A D curve
ABL6TS100G	1000 VA	5 A	6 A	GB2DB16	GV2RT10	10 A D curve *(3)*	3.5 A	4 A	GB2DB10	GV2RT08	6 A D curve
ABL6TS160G	1600 VA	8 A	8 A	GB2DB16	GV2RT14	10 A D curve *(3)*	5 A	4 A	GB2DB12	GV2RT10	6 A D curve
ABL6TS250G	2500 VA	–	25 A *(3)*	–	–	–	–	10 A *(3)*	GB2DB22	GV2RT16 *(3)*	–

Recommanded protection for the secondary

Protection on the secondary by fuses of thermal circuit breaker

Transformer		115 V ∼ secondary			
Reference	**Power**	**gG fuse** *(1)*	**aM fuses**	**TeSys GB2** *(1)*	**Acti9 IC60** *(2)*
ABL6TS02G	25 VA	–	0.25 A	–	–
ABL6TS04G	40 VA	0.5 A	0.5 A	–	–
ABL6TS06G	63 VA	0.5 A	0.5 A	GB2CD05	0.5 A C curve
ABL6TS10G	100 VA	1 A	1 A	GB2CD06	1 A C curve
ABL6TS16G	160 VA	1 A	1 A	GB2CD07	2 A C curve
ABL6TS25G	250 VA	2 A	2 A	GB2CD07	2 A C curve
ABL6TS40G	400 VA	4 A	4 A	GB2CD09	4 A C curve
ABL6TS63G	630 VA	6 A	6 A	GB2CD12	6 A C curve
ABL6TS100G	1000 VA	8 A	8 A	GB2CD16	10 A C curve
ABL6TS160G	1600 VA	12 A	12 A	GB2CD21	16 A C curve
ABL6TS250G	2500 VA	20 A	20 A	GB2CD22	20 A C curve

Recommended protection for the primary

Protection on the primary by fuse or thermal magnetic circuit breaker

Transformer		230 V ∼ single-phase input voltage					400 V ∼ single-phase input voltage				
Reference	**Power**	**MDL fuses UL listed** *(1)*	**aM fuses**	**TeSys GB2** *(1)*	**TeSys GV2RT**	**Acti9 IC60** *(2)*	**MDL fuses UL Listed** *(1)*	**aM fuses**	**TeSys GB2** *(1)*	**TeSys GV2RT**	**Acti9 IC60** *(2)*
ABL6TS02U	25 VA	0.18 A	0.16 A	–	–	–	0.25 A	0.16 A	–	–	–
ABL6TS04U	40 VA	0.25 A	0.25 A	GB2DB05	GV2RT03	0.5 A D curve *(3)*	0.25 A	0.16 A	–	–	–
ABL6TS06U	63 VA	0.37 A	0.5 A	GB2DB05	GV2RT03	0.5 A D curve *(3)*	0.25 A	0.25 A	–	–	–
ABL6TS10U	100 VA	0.5 A	0.5 A	GB2DB05	GV2RT04	1 A D curve *(3)*	0.3 A	0.5 A	GB2DB05	GV2RT03	0.5 A D curve
ABL6TS16U	160 VA	1 A	1 A	GB2DB06	GV2RT05	2 A D curve *(3)*	0.5 A	0.5 A	GB2DB06	GV2RT04	1 A D curve
ABL6TS25U	250 VA	1.25 A	2 A	GB2DB07	GV2RT06	2 A D curve *(3)*	0.75 A	1 A	GB2DB06	GV2RT05	1 A D curve
ABL6TS40U	400 VA	2 A	2 A	GB2DB09	GV2RT07	3 A D curve *(3)*	1.5 A	2 A *(3)*	GB2DB07	GV2RT06	2 A D curve
ABL6TS63U	630 VA	3 A	4 A	GB2DB14	GV2RT10 *(3)*	10 A D curve *(3)*	2.5 A	4 A *(3)*	GB2DB10	GV2RT08 *(3)*	4 A D curve
ABL6TS100U	1000 VA	5 A	6 A	GB2DB20	GV2RT14 *(3)*	10 A D curve *(3)*	5 A *(3)*	4 A	GB2DB12	GV2RT10 *(3)*	6 A D curve
ABL6TS160U	1600 VA	8 A	8 A	GB2DB20	GV2RT14	16 A D curve *(3)*	5 A *(3)*	4 A	GB2DB14	GV2RT10	6 A D curve
ABL6TS250U	2500 VA	–	16 A *(3)*	–	–	–	–	10 A *(3)*	GB2DB22	GV2RT16 *(3)*	16 A D curve

Recommanded protection for the secondary

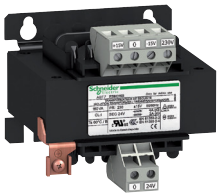
Protection on the secondary by fuses of thermal circuit breaker

Transformer		230 V ∼ secondary			
Reference	**Power**	**gG fuse** *(1)*	**aM fuses**	**TeSys GB2** *(1)*	**Acti9 IC60** *(2)*
ABL6TS02U	25 VA	–	0.16 A	–	–
ABL6TS04U	40 VA	–	0.16 A	–	–
ABL6TS06U	63 VA	–	0.25 A	–	–
ABL6TS10U	100 VA	0.5 A	0.5 A	GB2CD05	0.5 A C curve
ABL6TS16U	160 VA	0.5 A	0.5 A	GB2CD06	1 A C curve
ABL6TS25U	250 VA	1 A	1 A	GB2CD06	1 A C curve
ABL6TS40U	400 VA	2 A	2 A	GB2CD07	2 A C curve
ABL6TS63U	630 VA	2 A	2 A	GB2CD08	3 A C curve
ABL6TS100U	1000 VA	4 A	4 A	GB2CD09	4 A C curve
ABL6TS160U	1600 VA	6 A	6 A	GB2CD14	6 A C curve
ABL6TS250U	2500 VA	10 A	10 A	GB2CD16	10 A C curve

(1) For operation in compliance with UL.
(2) Check your local catalogue for the exact reference. For installation in North America, please select a UL489 compliant circuit breaker.
(3) Protection on the secondary is necessary.

Power supplies and transformers Phaseo

Transformers
ABL6TS, ABT7



ABT7ESM0●●B

ABL6TS●●●

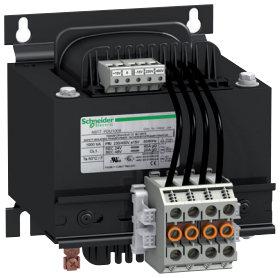
Transformers with phase-to-neutral (N-L1) or phase-to-phase (L1-L2) connection

Input voltage	Secondary		Nominal power	Reference	Weight kg/*lb*
	Type	Voltage			
Transformers 230 V, Single winding					
230 V ± 15 V single-phase, 50/60 Hz	Single winding	24 V	40 VA	**ABT7ESM004B**	1.020/*2.249*
			63 VA	**ABT7ESM006B**	1.140/*2.513*
			100 VA	**ABT7ESM010B**	1.900/*4.189*
			160 VA	**ABT7ESM016B**	2.720/*5.997*
			250 VA	**ABT7ESM025B**	3.540/*7.804*
			320 VA	**ABT7ESM032B**	4.080/*8.995*
			400 VA	**ABT7ESM040B**	5.100/*11.244*
Transformers 230/400 V, Single winding					
230/400 V ± 15 V single-phase 50/60 Hz	Single winding	12 V	25 VA	**ABL6TS02J**	0.700/*1.543*
			40 VA	**ABL6TS04J**	1.200/*2.646*
			63 VA	**ABL6TS06J**	1.600/*3.527*
			100 VA	**ABL6TS10J**	2.100/*4.630*
			160 VA	**ABL6TS16J**	3.200/*7.055*
			250 VA	**ABL6TS25J**	4.400/*9.700*
		24 V	25 VA	**ABL6TS02B**	0.700/*1.543*
			40 VA	**ABL6TS04B**	1.200/*2.646*
			63 VA	**ABL6TS06B**	1.600/*3.527*
			100 VA	**ABL6TS10B**	2.100/*4.630*
			160 VA	**ABL6TS16B**	3.200/*7.055*
			250 VA	**ABL6TS25B**	4.400/*9.700*
			400 VA	**ABL6TS40B**	6.500/*14.330*
			630 VA	**ABL6TS63B**	9.800/*21.605*
			1000 VA	**ABL6TS100B**	14.300/*31.526*
			1600 VA	**ABL6TS160B**	19.400/*42.770*
			2500 VA	**ABL6TS250B**	27.400/*60.407*
		115 V	25 VA	**ABL6TS02G**	0.700/*1.543*
			40 VA	**ABL6TS04G**	1.200/*2.646*
			63 VA	**ABL6TS06G**	1.600/*3.527*
			100 VA	**ABL6TS10G**	2.100/*4.630*
			160 VA	**ABL6TS16G**	3.200/*7.055*
			250 VA	**ABL6TS25G**	4.400/*9.700*
			400 VA	**ABL6TS40G**	6.500/*14.330*
			630 VA	**ABL6TS63G**	9.800/*21.605*
			1000 VA	**ABL6TS100G**	14.300/*31.526*
			1600 VA	**ABL6TS160G**	19.400/*42.770*
			2500 VA	**ABL6TS250G**	27.400/*60.407*
		230 V	25 VA	**ABL6TS02U**	0.700/*1.543*
			40 VA	**ABL6TS04U**	1.200/*2.646*
			63 VA	**ABL6TS06U**	1.600/*3.527*
			100 VA	**ABL6TS10U**	2.100/*4.630*
			160 VA	**ABL6TS16U**	3.200/*7.055*
			250 VA	**ABL6TS25U**	4.400/*9.700*
			400 VA	**ABL6TS40U**	6.500/*14.330*
			630 VA	**ABL6TS63U**	9.800/*21.605*
			1000 VA	**ABL6TS100U**	14.300/*31.526*
			1600 VA	**ABL6TS160U**	19.400/*42.770*
			2500 VA	**ABL6TS250U**	27.400/*60.407*

Power supplies and transformers Phaseo

Transformers
ABL6TS, ABT7

ABT7PDU002●…032●



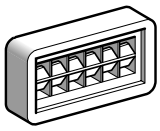
ABT7PDU040●…250●

Transformers with phase-to-neutral (N-L1) or phase-to-phase (L1-L2) connection (continued)

Input voltage	Secondary		Nominal power	Reference	Weight kg/*lb*
	Type	Voltage			
Transformers 230/400 V, Double winding					
With cover, connected by internal jumpers with LED indicators					
230/400 V ± 15 V single-phase 50/60 Hz	Double winding	2 x 24 V	25 VA	**ABT7PDU002B**	1.100/*2.425*
			40 VA	**ABT7PDU004B**	1.400/*3.086*
			63 VA	**ABT7PDU006B**	1.940/*4.277*
			100 VA	**ABT7PDU010B**	2.860/*6.305*
			160 VA	**ABT7PDU016B**	4.400/*9.700*
			250 VA	**ABT7PDU025B**	5.600/*12.346*
			320 VA	**ABT7PDU032B**	7.100/*15.653*
		2 x 115 V	25 VA	**ABT7PDU002G**	1.100/*2.425*
			40 VA	**ABT7PDU004G**	1.400/*3.086*
			63 VA	**ABT7PDU006G**	1.940/*4.277*
			100 VA	**ABT7PDU010G**	2.860/*6.305*
			160 VA	**ABT7PDU016G**	4.400/*9.700*
			250 VA	**ABT7PDU025G**	5.600/*12.346*
			320 VA	**ABT7PDU032G**	7.100/*15.653*
Without cover, connected by external jumpers					
230/400 V ± 15 V single-phase 50/60 Hz	Double winding	2 x 24 V	400 VA	**ABT7PDU040B**	7.400/*16.314*
			630 VA	**ABT7PDU063B**	7.900/*17.418*
			1000 VA	**ABT7PDU100B**	14.000/*30.865*
			1600 VA	**ABT7PDU160B**	20.000/*44.092*
			2500 VA	**ABT7PDU250B**	28.000/*61.729*
		2 x 115 V	400 VA	**ABT7PDU040G**	7.400/*16.314*
			630 VA	**ABT7PDU063G**	7.900/*17.418*
			1000 VA	**ABT7PDU100G**	14.000/*30.865*
			1600 VA	**ABT7PDU160G**	20.000/*44.092*
			2500 VA	**ABT7PDU250G**	28.000/*61.729*

Separate parts for ABT6TS and ABT7

Designation	Use on transformers	Order in multiples of	Unit reference	Weight kg/*lb*
Plates for mounting on ⊔ rail	ABL6TS02●	5	**ABL6AM00**	0.045/*0.099*
	ABT7ESM004B/006B ABL6TS04●	5	**ABL6AM01**	0.050/*0.110*
	ABL6TS06●	5	**ABL6AM02**	0.055/*0.121*
	ABT7ESM010B ABL6TS10●	5	**ABL6AM03**	0.065/*0.143*
	ABT7ESM016B	5	**ABL6AM04**	0.085/*0.187*
Self-adhesive marker tag holder 20 x 10 mm	–	50	**AR1SB3**	0.001/*0.002*



AR1SB3

Replacement parts for ABT6TS and ABT7

Designation	Use on	Reference	Weight kg/*lb*
Pack of 10 jumpers	ABT7PDU range double-winding transformer	**ABT7JMP01**	0.010/*0.022*

Product reference index