

Argentina

Chloride Koexa S.A.
San Nicolás 1542
(C1407DDD) Buenos Aires
Argentina
Tel: +54 11 4639-4404
Fax: +54 11 4639-4405

Australia

Chloride Power Protection Pty Ltd
Ground Floor
16 Giffnock Avenue
North Ryde NSW 2113
Australia
Tel: +61 (0) 2 98881266
Fax: +61 (0) 2 98881966

Brazil

Chloride Power Protection
Av. Eng. Alberto de Zagottis, 695
Jurubatuba - São Paulo - SP
CEP: 04675-085
Brasil
Tel: +55 11 5541 5599
Fax: +55 11 5541 5599

China

Chloride Masterguard Power Systems Ltd.,
Shanghai (CMPS)
CIMIC Tower, Office 417
1090 Century Avenue
Pudong
Shanghai 200120
China
Tel: +86 21 58361820
Fax: +86 21 58361690

France & International

Chloride Industrial Systems
30 Avenue Montgolfier - BP 90
69684 Chassieu Cedex
France
Tel: +33 (0) 4 78 40 13 56
Fax: +33 (0) 4 78 90 58 90

Chloride Power Protection
1 rue Félix Potin
Z.A. Les Belles Vues
91290 Arpajon
France
Tel: +33 (0) 1 69 26 12 81
Fax: +33 (0) 1 60 83 18 16

Germany

Masterguard GmbH
Schallershofer Str. 141
91056 Erlangen
Germany
Tel: +49 (0) 9131 6300 100
Fax: +49 (0) 9131 6300 270

Italy

Chloride UPS Systems
Via Fornace 30
40023 Castelguelfo
Bologna
Italy
Tel: +39 0542 632111
Fax: +39 0542 632120

Portugal

Chloride Power Protection
Rua dos Terços 574
Zona Industrial de Canelas
4405 270 Canelas VNG
Portugal
Tel: +351 (0) 2 27 151210
Fax: +351 (0) 2 27 126337

Spain

Chloride España, S.A.U.
Edificio Europa III
C/San Rafael 1. Pol. Ind. Alcobendas
28108 Alcobendas Madrid
Spain
Tel: +34 91 414 00 30
Fax: +34 91 662 37 76

Thailand

Chloride Power Protection
Panjathani Tower, 20th Floor
127/25 Nonsee Road
Chongnonsee
Yannawa
Bangkok 10120
Thailand
Tel: +662 681 0100
Fax: +662 681 0109

Turkey

Masterguard
Sebnem Sok n°:14 K:4
81110 Bostanci-Istanbul
Turkey
Tel: +90 216 464 47 00
Fax: +90 216 464 47 15

UAE

Chloride Industrial Middle East
FZ LLC
PO BOX 500221
Building 5, office 118
Dubai internet city
Dubai
UAE
Tel: +971 4 391 5333
Fax: +971 4 391 5335

UK

Chloride Power Protection
George Curl Way
Southampton
SO18 2RY
UK
Tel: +44 (0) 23 8061 0311
Fax: +44 (0) 23 8061 0852

USA

Chloride Power Protection
27944 North Bradley Road
Libertyville
IL 60048
USA
Tel: + 1 847 816 6000
Fax: + 1 847 549 7919

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Excel Apodycs

400 W - 450 kW

CHLORIDE
INDUSTRIAL SYSTEMS

Chloride Industrial Systems
30 avenue Montgolfier - BP 90
69684 Chassieu cedex - France
Tel.: +33 (0)4 78 40 13 56
Fax: +33 (0)4 78 90 58 90

www.chloridepower.com
industrial.sales@chloridepower.com
industrial.support@chloridepower.com



DC UPS - RECTIFIER - BATTERY CHARGER

EXCEL APODYS DC UPS 400 W - 450 kW

The Range

The Excel Apodys range of industrial rectifiers/battery chargers is available as standard from 400W to 90kW in 1-phase input configuration, and up to 450kW in 3-phase input configuration.

Flexibility for Customised Solutions

Excel Apodys is fully adaptable to customers' power protection needs. A full range of additional options is available enabling us to tailor solutions for diverse industrial environments:

- 12-pulse rectifiers,
- DC distribution,
- isolated DC/DC converters,
- up to IP65 external protection,
- parallel configurations with 50% or 100% battery,
- battery Management system,
- EEx battery protection boxes...

For long-lasting power interruptions, Excel Apodys can be designed to operate with extended battery autonomies: up to 72 hours autonomies provide permanently secured industrial processes.

Excel Apodys chargers are also available with 400VDC output. This configuration allows us to combine this range with the Exond Apodys inverters range in order to design specific high ratings double conversion AC UPS systems (up to 500kVA).

Leading technology

Excel Apodys applies the latest Digital Control technology to control the 6-pulse thyristor-bridge rectifier. The embedded Digital Signal Processor (DSP) processes signals by up to 10 times faster than standard analogue methods. The result is improved process reliability and enhanced safety for personnel, even in the harshest operating environments.

The innovative modular assembly allows us to satisfy the most demanding international project schedules.

The product design affords easy front-access to all vital modules of the system. As a result, maintenance times are significantly reduced.

Reliability

Excel Apodys provides lasting secure power architecture for your industrial applications through:

- natural ventilation on most of the range,
- continuous operation at full load in a permanent 40°C ambient temperature,
- system lifetime of at least 20 years in continuous operation conditions,
- robust mechanical design (vertical and horizontal acceleration stress up to 0,2g as standard).

Communication

Excel Apodys uses intuitive multilingual digital graphic control, meaning system status, measurements and alarms are accessible from the front panel of the UPS.

The embedded 'Event Log' function allows the user to trace the last 100 events. Event memory is activated from the first event appearance on.

RS232, RS485 and voltage-free contacts allow the monitoring of UPS on SCADA systems

Advanced Battery Care

Excel Apodys is fully compatible with lead-acid and nickel-cadmium batteries, sealed or vented.

A programmable battery test evaluates the efficiency of the entire battery.

Tests on individual cells are achieved by employing our latest Battery Management system option.

Battery cabinets matching the DC-UPS system cabinet can be offered, regardless of the required autonomy. This allows a homogeneous UPS system within technical rooms.

Monitoring

The Apodys family is fully compatible with LIFE.net, Chloride's remote monitoring service, which provides:

- continuous real time UPS monitoring,
- regular transmission of an operating status report,
- UPS performance analysis,
- power quality monitoring to analyse mains disturbance trends.

Applications



Excel Apodys protects DC powered electrical equipments of heavy duty applications, such as:

- oil and gas offshore and onshore,
- refining, petrochemicals,
- power generation, transmission and distribution,
- transportation (rail, aeronautic)...

Secure Power Always

In order to reach the highest level of business continuity, Chloride offers a range of maintenance plans, which will:

- help deliver reliability to your load,
- increase the lifetime of your power protection equipment,
- optimise your capital expenditure,
- provide risk management at a fixed cost,
- provide a pro-active approach to disaster recovery.

For more information please contact your local Chloride sales office.

www.chloridepower.com

Delegate your power management to the experts.

Technical data

	Ratings (A)	16	25	40	60	80	100	125	160	200	250	320	400	500	600	750	1000	1250	1500	2000	2500		
1-Phase input 1x110VAC 1x230VAC		24/48/110/120/220/240 VDC																					
3-Phase input 3x400VAC		24 VDC																					
		48/110/120 VDC																					
		220/240 VDC																					

Input

Nominal AC Input Voltage	1x110 VAC (120 VAC) 1x230 VAC (220, 240 VAC) 3x400 VAC (3x380 V, 3x415 V)
Input voltage tolerance	± 15%
Nominal input frequency / tolerance	50 Hz (60Hz) / ± 5%
Rectifying technology	6-pulse bridge as standard for 3-phase input (12-pulse upon request)

Output

DC voltage	24 / 48 / 110 / 120 / 220 / 240 VDC (other voltage: please consult us)
Rectifier output voltage stability	< 1% (in float mode, 0 to 100% load step, input within voltage tolerance)
Rectifier output voltage ripple	< 1 % RMS
Boost mode current limitation	0,1 C10 (Lead Acid battery) / 0,2 C5 (Nickel Cadmium battery)
Insulation resistance	≥ 10 MΩ, 500VDC

General data

Operating temperature (°C)	Rated power available from 0 °C to 40 °C in permanent operation conditions
Relative humidity	< 90% non condensing
Operating altitude	1000m (without derating)
Cooling	Natural ventilation on most of the range. (fan-assisted for ratings above 1200A)
External protection	IP 20 as standard (others available upon request)
Internal protection	IP 20
Lock	Steel locked door
Painting	Grey RAL 7035 textured semi-gloss
Dimensions	According to ratings and options - see technical specification

Standards

Compliance	IEC 950, 439, 146, 529, 726, 62040-1,-2,-3
CE directives	73/23/EEC-LVD, 89/336/EEC-EMC
US Standards	Manufacturing following UL, ANSI, NEMA, IEEE standards is available upon demand

Options

Rectifier	12-pulse rectifier (for 3-phase input), harmonic filters, ripple filters, higher ratings, Higher ratings, other output voltages, special Mains...
Battery	Battery protection box, Battery Management System, matching battery cabinet...
System	Parallel configurations, DC/DC serial regulator, isolated DC/DC converter, DC distribution...
Mechanical	Up to IP65 external, top cable entry, other painting, anti-seismic...

