



Local Area Networks (LAN)

Servers

Data centers

Internet centers (ISP/ASP/POP)

Industrial PLCs

Emergency devices (lights/alarms)

Electro-medical devices

Telecommunication devices

Industrial applications



Master DIALOG

30-100 kVA three-phase/single-phase
250-800 kVA three-phase/three-phase

The **Master DIALOG** range includes the 250-300-400-500-600-800kVA three-phase models and 30-40-60-80-100 kVA three/single-phase and uses double conversion on-line technology (VFI) with an isolation transformer on the output of the inverter.

The load is powered continuously by the inverter with a filtered, stabilised and regulated sinewave supply. The input and output EMI filters considerably increase the immunity of the load to mains disturbances and surges.

Master DIALOG provides maximum protection for vital 'mission-critical' networks, security applications (electromedical) and industrial applications thanks to its outstanding mechanical and electrical design.

- isolation transformer on the inverter
- extremely high short-circuit current
- sinusoidal absorption (THDi up to 5% with CLEAN version)

SPECIFIC SOLUTIONS

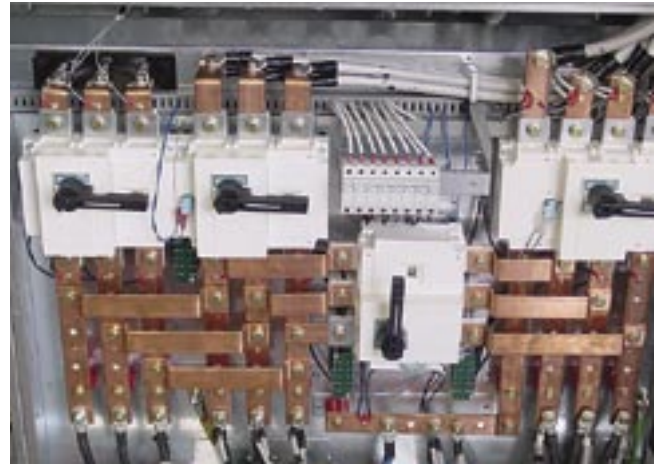
Master DIALOG can be adapted to your requirements. Please contact RIELLO UPS to discuss specific applications and options.

CHARACTERISTICS

- reliable, filtered, stabilised and regulated sinewave output (double conversion on-line technology VFI according to EN62040-3 specifications with filters for atmospheric disturbance suppression)
- high reliability: IGBT technology, full microprocessor control with no-break static and manual bypasses, extremely high short-circuit current to ensure compatibility with the most difficult applications (lighting, drives and industrial processes) and an isolation transformer on the inverter output
- minimum impact on the mains supply: up to 5% input current distortion to prevent resonance problems for upstream applications. The distortion is unaffected by impedance or frequency, and allows economies when sizing power sources such as isolation transformers or generators for Master DIALOG installations
- high level diagnostics: event log, states, measurements and alarms, available from the built-in LCD in several languages
- maximum reliability and power availability (parallel up to 6 units for redundant (N+1) or parallel operation)
- EPO (Emergency Power Off) input for UPS shut-down using remote emergency button
- compatible with TeleGuard for remote maintenance (see p.11)
- front access
- parallel card fitted
- back-feed protection fitted as standard.



Digital control



Breakers (600kVA)

SYSTEM CONFIGURATION

The **Master DIALOG** range features a wide range of modules and options that can be manufactured into one complete system to solve your power problems. Each system is therefore unique and we ask that you consult our engineers for your specific application.

OPTIONS

Various options are available to configure a back-up 'system' tailored to your requirements; some of these are given in the list below:

- isolation transformers
- various sealed lead acid battery types including 5 year, 10 year and 20 year design life, NiCad options and runtimes up to several hours
- communications software
- automatic battery circuit breaker (for remote control)
- solutions for low input current distortion.



UPS mounted in a shelter

THREE-PHASE/SINGLE-PHASE MODELS	RM 30	RM 40	RM 60	RM 80	RM 100
INPUT					
Rated power (kVA)	30	40	60	80	100
Rated voltage (V)	380-400-415 Vac three-phase				
Voltage range	± 15%				
Frequency range	50 ÷ 60 Hz ± 5%				
Input current	sinewave (in Master DIALOG CLEAN version)				
BYPASS					
Rated current (A)	130	174	261	348	434
Rated voltage (V)	220-230-240 Vac single-phase				
Permitted voltage range	± 15% (selectable from ± 10% to ± 25% from front panel)				
Rated frequency	50/60 Hz (autorange)				
BATTERIES					
Type	Maintenance-free sealed lead-acid				
Maximum recharge current (A)	0,2xC10				
RECTIFIER OUTPUT					
Rated battery voltage	384 Vdc				480 Vdc
Maintenance voltage	Variable acc. to temperature (-0,5 Vx°C)				
Ripple	<1%				
INVERTER OUTPUT					
Rated power (kVA)	30	40	60	80	100
Rated power (kW)	24	32	48	64	80
Number of phases	1				
Rated voltage (V)	220-230-240 Vac				
Rated current (A)	130	174	261	348	434
Crest factor (I _{peak} /I _{rms})	3 : 1				
Waveform	Sinewave				
Static stability	± 1%				
Dynamic stability	± 5% in 5ms				
Frequency	50 Hz				
Overload	125% 150% of the rated current for 10'/1'				
Frequency stability	± 0,05% on mains failure ± 2% with mains supply present				
ENVIRONMENTAL					
Operating temperature	0 ÷ 40 °C				
Relative humidity	95% (non condensing)				
Colour	Light grey RAL 7035				
Noise	65 dBA at 1m				
Protection rating	IP20				
Efficiency	> 91%				
Compliance	Safety EN 62040-1 EMC EN 62040-2 Directives 73/23-93/68-89/336 EEC EN 62040-3				
Weight (kg)	280	330	440	520	650
Dimensions (hwd) (mm)	1200x555x720		1400x800x740		1400x1070x740

Product characteristics can be customised to meet client specifications.

THREE-PHASE MODELS	RT 250 12 pulses	RT 300 12 pulses	RT 400 12 pulses	RT 500 12 pulses	RT 600 12 pulses	RT 800 12 pulses
INPUT						
Rated power (kVA)	250	300	400	500	600	800
Rated voltage (V)	380-400-415 Vac three-phase					
Voltage range	± 15%					
Frequency range	50 ÷ 60 Hz ± 5%					
Input current	sinewave					
BYPASS						
Rated current (A)	262	435	580	725	870	1160
Rated voltage (V)	380-400-415 Vac single-phase					
Permitted voltage range	± 15% (selectable from ± 10% bis ± 25% from front panel)					
Rated frequency	50/60 Hz (autorange)					
BATTERIES						
Type	Maintenance-free sealed lead-acid					
Maximum recharge current (A)	0,2xC10					
RECTIFIER OUTPUT						
Rated battery voltage	480 Vdc					
Maintenance voltage	Variable acc. to temperature (-0,5 Vx°C)					
Ripple	<1%					
INVERTER OUTPUT						
Rated power (kVA)	250	300	400	500	600	800
Rated power (kW)	200	240	320	400	480	640
Number of phases	3 + N					
Rated voltage (V)	380-400-415 three-phase + N					
Rated current (A)	362	434	579	724	869	1159
Crest factor (Ipeak/Irms)	3 : 1					
Waveform	Sinewave					
Static stability	± 1%					
Dynamic stability	± 5% in 5ms					
Frequency	50 Hz					
Overload	125% 150% of the rated current for 10'/1'					
Frequency stability	± 0,05% on mains failure ± 2% with mains supply present					
ENVIRONMENTAL						
Operating temperature	0 ÷ 40 °C					
Relative humidity	95% (non condensing)					
Colour	Light grey RAL 7035					
Noise	65 dBA at 1m			78 dBA at 1m		
Protection rating	IP20					
Efficiency	> 92 %	> 93 %			> 94 %	
Compliance	Safety EN 62040-1 EMC EN 62040-2 Directives 73/23-93/68-89/336 EEC EN 62040-3					
Weight (kg)	2170	2200	2590	3800	3900	5250
Dimensions (hwd) (mm)	1900x1630x850		1900x1630x1000	1900x3190x1000		1900x4400x1000

For more information ask for a copy of the Riello UPS Technical Specifications for this product range.
Product characteristics can be customised to meet client specifications.