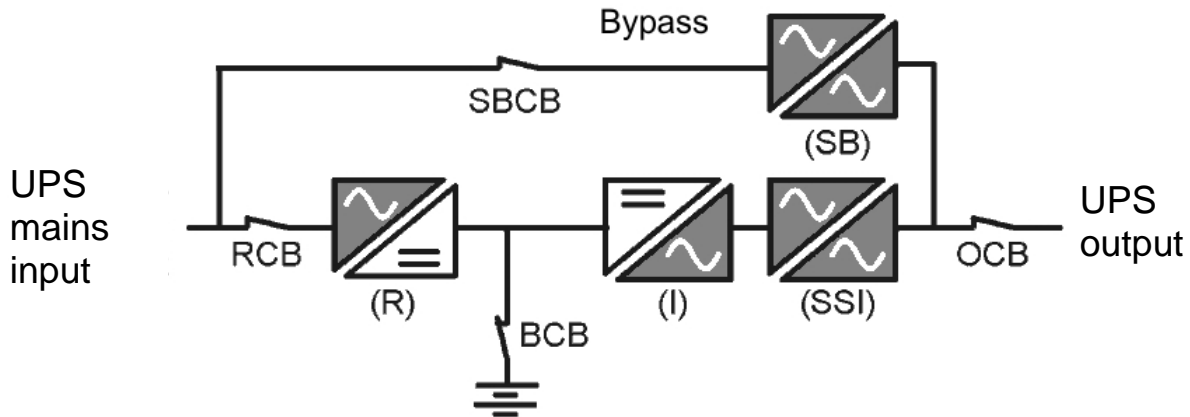


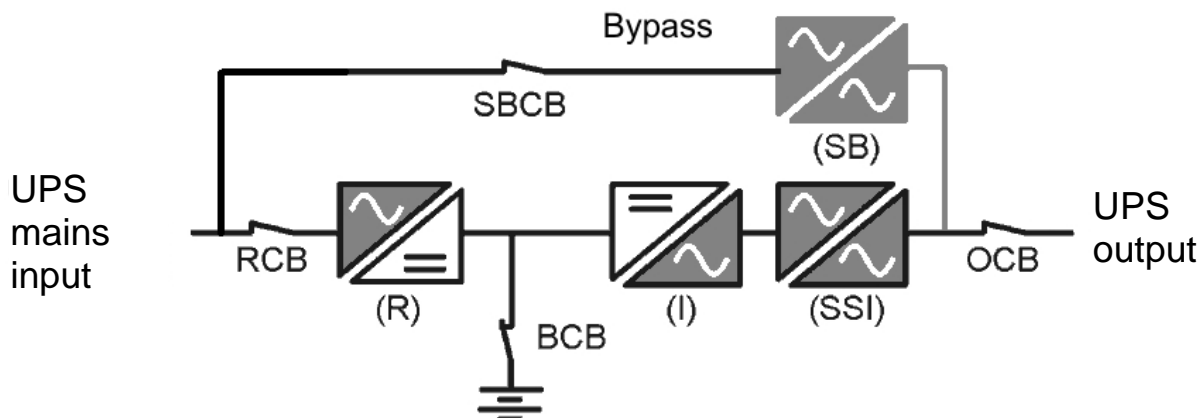
MODEL:		700 RT	1000 RT	1500 RT	2000 RT	3000 RT
Power						
Maximum power (kVA)		700	1000	1500	2000	3000
Maximum power (kW)		630	900	1350	1800	2700
Input						
Nominal Voltage		230VAC				
Input voltage range		120VAC – 276VAC				
THDi		< 5% at linear load				
Input power factor		≥ 0.99 at 100% nominal load				
Input frequency range		(45~55) / (54~66) Hz				
Current consumption		3.6A	5.9A	7.8A	10.1A	15.5A
Output						
Output voltage		208, 220, 230, 240VAC				
Voltage tolerance		± 1%				
Nominal current		2.7A	3.9A	5.9A	7.8A	11.7A
Frequency tolerance		± 0.2Hz (battery mode)				
Voltage form		Pure sine wave				
Crest factor		3				
Switchover time normal operation		Mains <> INVERTER: 0ms				
Switchover time (BYPASS,ECO)		Bypass <> INVERTER: maximum 10ms				
Efficiency						
Efficiency at full load	LINE MODE	> 89% with fully charged batteries				
	BATTERY MODE	> 84%				
	ECO MODE	> 95%				
Internal batteries						
Number of batteries		3	3	4	4	6
Battery voltage		36VDC		48VDC		72VDC
Charching current		Standard 1.5A / XL-version 6A				
Charging time		app. 6h to 90%				
Typical autonomy times (cos Φ 0,7)						
Load 100% (minutes)		9	7	5	5	7
Load 50% (minutes)		20	15	11	11	15
XL-versions		Depending on the equipment and number of battery banks				

Topology and operating modes

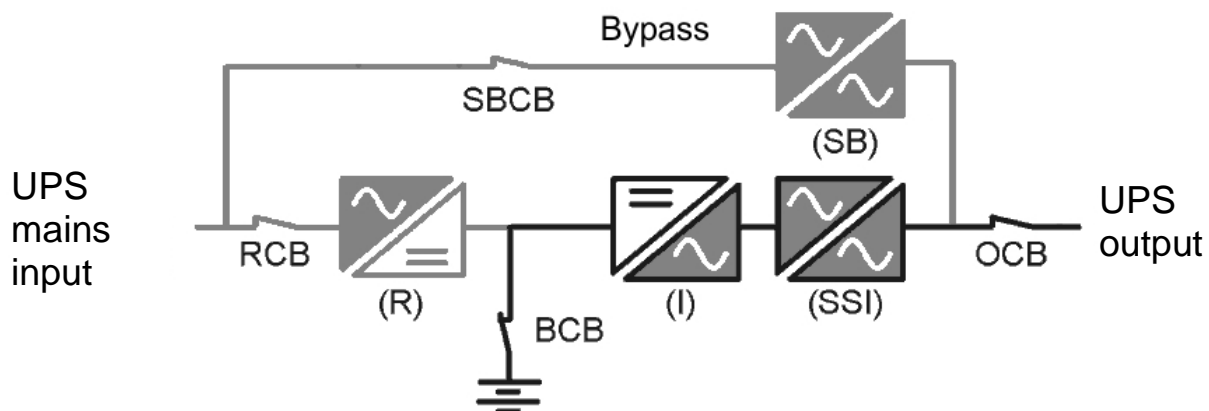
Topology, functional groups of the UPS device:



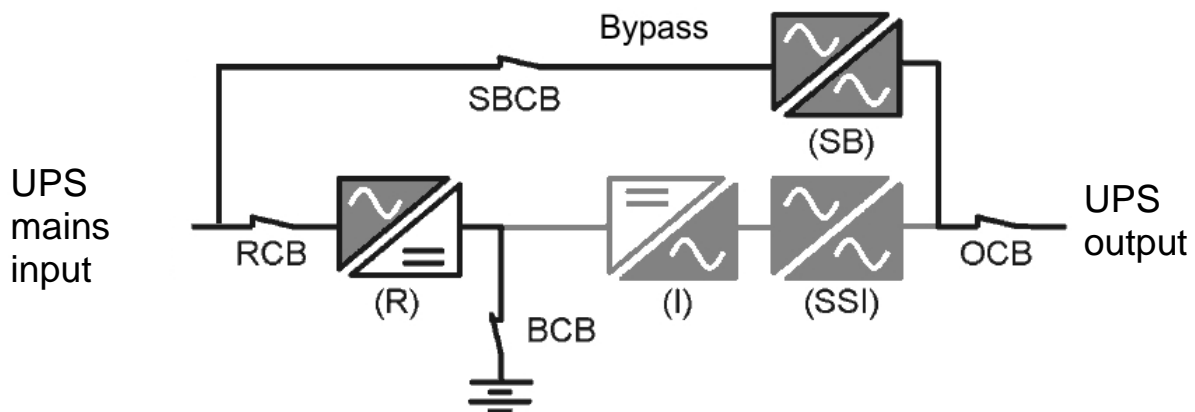
Normal mode (INVERTER-MODE):



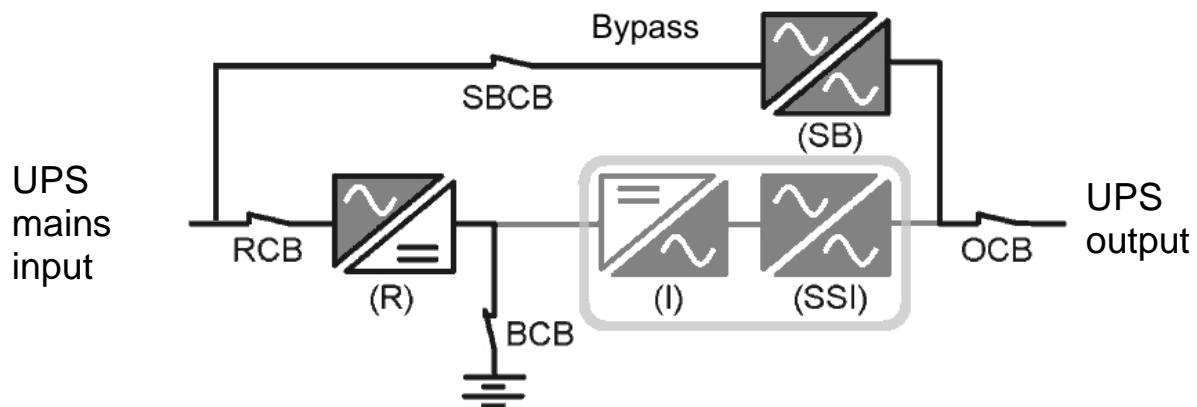
Support or autonomy operation (BATTERY-MODE):



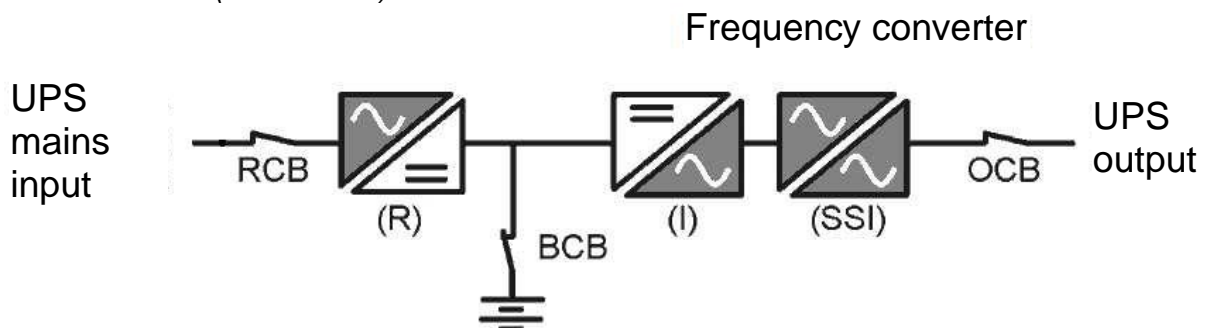
Bypass mode (FAULT MODE):

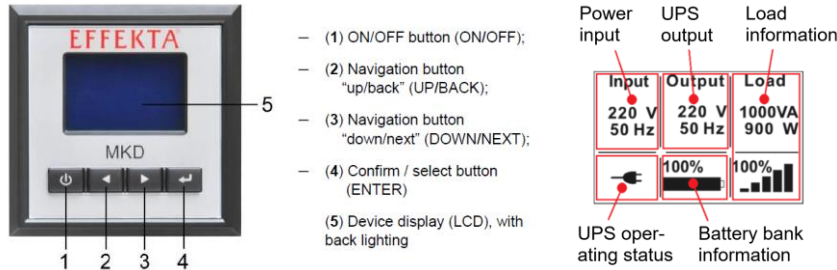


Energy-saving operation (ECO MODE):



Converter-mode (CVF MODE):



MODEL:		700 RT	1000 RT	1500 RT	2000 RT	3000 RT
General						
LC-Display (Backlit alphanumeric LC display)		<div></div>				
Communication		smart adapter slot (for relay- or SNMP card)				
Device protection		Overload, deep discharge, overcharging				
Device class		C2				
Protection class		IP20				
Casing		Steel sheet, plastic front panel				
Standard weight with battery		16.2kg	16.2kg	19.7kg	19.7kg	28.6kg
Weight XL version without batteries		8.4kg	8.4kg	9.3kg	9.3kg	13.2kg
Dimensions 19" 2U (HxWxD in mm) incl. XL-version		86.5 x 438 x 435				86.5 x 438 x 604
Cooling		Fan cooling, convective				
Connections	Input	IEC (10A)				IEC (16A) 3000 XL hard wired
	Output	8 x IEC (10A)				+ 1 x IEC (16A)
Standards		Security: EN 62040-1 EMC: EN 62040-2 Operation: EN 62040-3				
Environment						
Temperature range		Operation: 0 ... 40 ° C Recommended: + 15 ... + 25 ° C (Outside the recommended range the battery life is reduced) Storage: -25 ... 55 ° C (without rechargeable battery!)				
Influence of operating height		< 1000m MSL nominal power > 1000m MSL -> Loss: app. 1% per 100m				
Humidity		0 – 95% not condensing				
Operating noise		< 52dB				

Optional external battery pack units			
UPS:	MKD 700 RT XL MKD 1000 RT XL	MKD 1500 RT XL MKD 2000 RT XL	MKD 3000 RT XL
Item number	ABC4X(1/2)03009...	ABC4X(1/2)04009...	ABC3X(1/2)06009...
Connection voltage	36VDC nominal	48VDC nominal	72VDC nominal
Assembly / capacity	3/6 x 12V/9Ah	4/8 x 12V/9Ah	6/12 x 12V/9Ah
Weight	14.7kg / 22.8kg	17.7kg / 28.5kg	24.5kg / 40.7kg
Dimensions 19" 2U (W x D x H)	438 x 430 x 86.5mm		438 x 608 x 86.5mm