

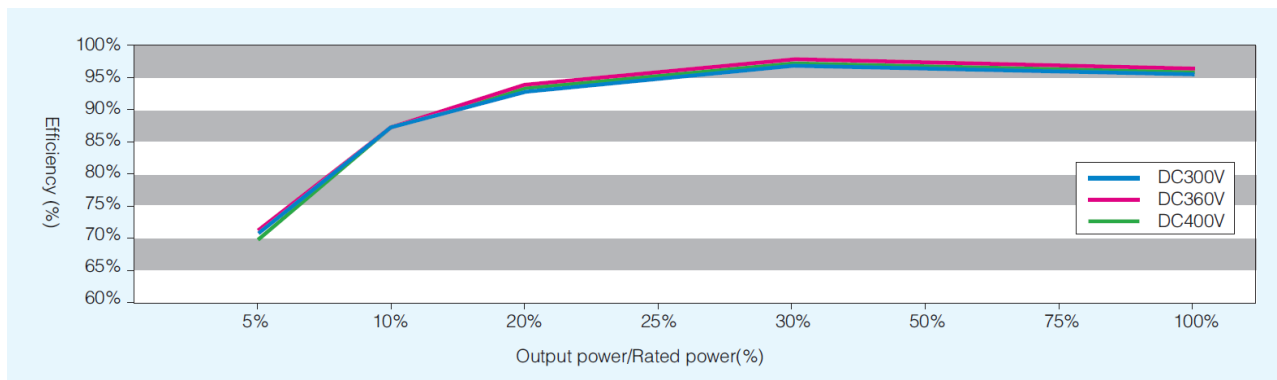


## Windon LS 1H / LS 1.5H / LS 2H / LS 3H

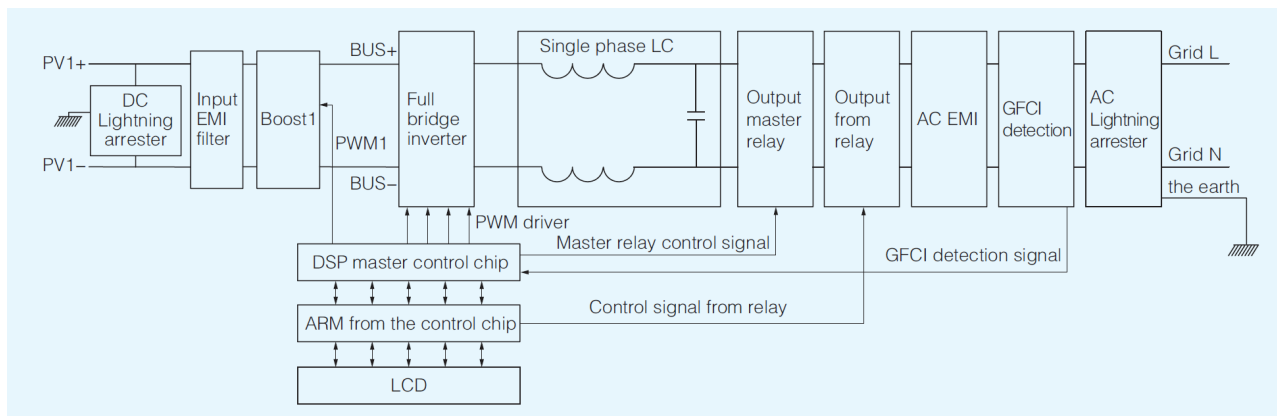
### Ledande teknik på svenska

- Stor spänningsvidd på DC-sidan
- Effektivitet på 98.5%
- Integrerad DC-switch
- Fläktlös tyst design
- IP65 klassad
- 25 års beräknad livslängd
- Konfigurering med WIFI/USB
- Svensk meny, portal och APP (android & Iphone)
- Svensk service och support, utbytesgaranti 5 år
- Lätt design, hela chassit i aluminium
- Transformatorlös och låg vikt
- Passar alla typer av el-solmoduler
- Fjärrmanuvreras vid behov av service.

### Effektivitetskurva



### Förenklat diagram på växelriktaren



## Technical specifications

DATASHEET	LS 1H	LS 1.5H	LS 2H	LS 3H
<b>INPUT DATA (DC)</b>				
Max. recommended PV power	1100W	1580W	2100W	3150W
Max. recommended PV power / MPPT	1100W	1580W	2100W	3150W
Max. DC voltage	450V	450V	450V	500V
Start voltage	80V	80V	80V	100V
PV voltage range	60-450V	60-450V	60-450V	70-500V
MPP work voltage range / nominal Volt	70-450V / 180V	60-450V / 250	60-450V / 250	100-500V / 360V
Full load DC voltage range	110-400V	150-400V	150-400V	150-450V
Max. input current	11.A	11A	11.A	11.A
Max. input current / MPP	11.A	11.A	11.A	11.A
Number of MPP trackers / strings / MPP tracker	1 / 1	1 / 1	1 / 1	1 / 2
<b>OUTPUT (AC)</b>				
Rated AC output power	1000W	1500W	2000W	3000W
Max. AC apparent power	1000VA	1500VA	2000VA	3000VA
Max. output current	5.0A	7.5A	10.0A	15A
AC nominal voltage / range	240VAC / 180-280VAC	240VAC / 180-280VAC	240VAC / 180-280VAC	240VAC / 180-280VAC
AC grid frequency / range	50Hz / 45Hz-65Hz	50Hz / 45Hz-65Hz	50Hz / 45Hz-65Hz	50Hz / 45Hz-65Hz
Power factor	0,9 leading, lagging	0,9 leading, lagging	0,9 leading, lagging	0,9 leading, lagging
THID	Less than 3%	Less than 3%	Less than 3%	Less than 3%
AC grid connection type	Singel phase, 1-fas	Singel phase, 1-fas	Singel phase, 1-fas	Singel phase, 1-fas
<b>EFFICIENCY</b>				
Max. Efficiency	97,0 %	97,2 %	97,2 %	97,5 %
Euro-eta	96 %	96,3 %	96,3 %	96,6 %
MPPT Efficiency	99,9%	99,9%	99,9 %	99,9 %
<b>PROTECTION DEVICES</b>				
DC reverse polary protection			Yes	
DC Switch for each MPP			opt	
Output over current protection			Yes	
Output overvoltage protection-varistor			Yes	
Ground fault monitoring			Yes	
Grid monitoring			Yes	
Integrated all-pole sensitive leakage current monitoring			Yes	
<b>GENERAL DATA</b>				
Dimensions (W/H/D)			355x280x170 mm	
Weight	9 KG	10 KG	10 KG	16,5 KG
Operation temperature range			-25°C to +60°C	
Noise emission (typical)			25dB (A)	
Altitude			2000 m	
Self-Consumption (night)			Less than 0,5W	
Topology			Transformless	
Cooling concept			Natural	
Environmental Protection Rating			IP65	
Relative Humidity			100%	
<b>FEATURES</b>				
DC connection			MC4	
AC connection			C16 / 3	
Display			LCD, LED	
Interfaces: USB / WIFI / GPRS / RS485			Yes / Yes / opt / opt	
Warranty: 5 years / 10 years			Yes / opt	
<b>CERTIFICATES AND APPROVALS</b>				
Safety standards	EN 62109, AS/NZS3100 , EN 50438			
EMC (Electro Magnetic Compatibility) standards	EN61000-6-1,EN61000-6-2,EN61000-6-3,EN61000-6-4,EN61000-3-11,EN61000-3-12,			
Grid Standards	VDE-AR-4105,VDE0126-1-1,G59/2,AS4777,CQC			

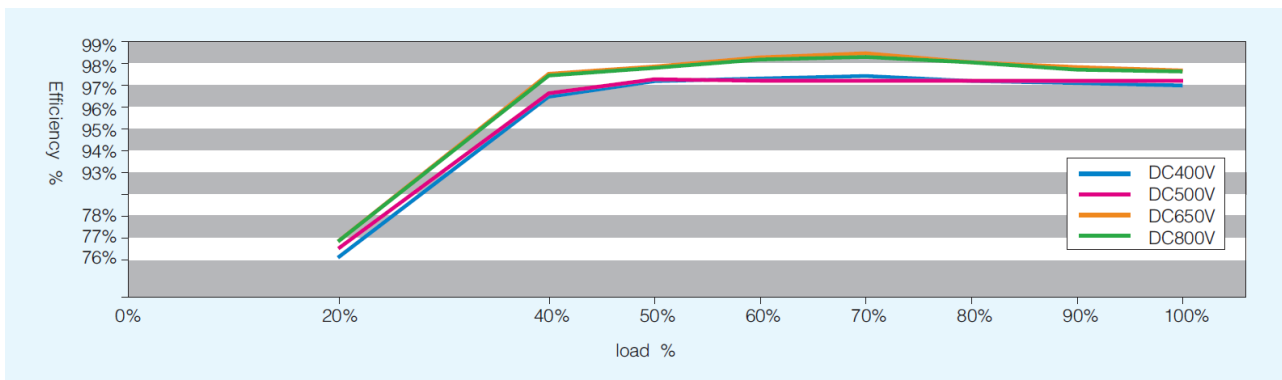


## Windon LT 5HD / LT 8HD / LT 10HD / LT 15HD / LT 20HD

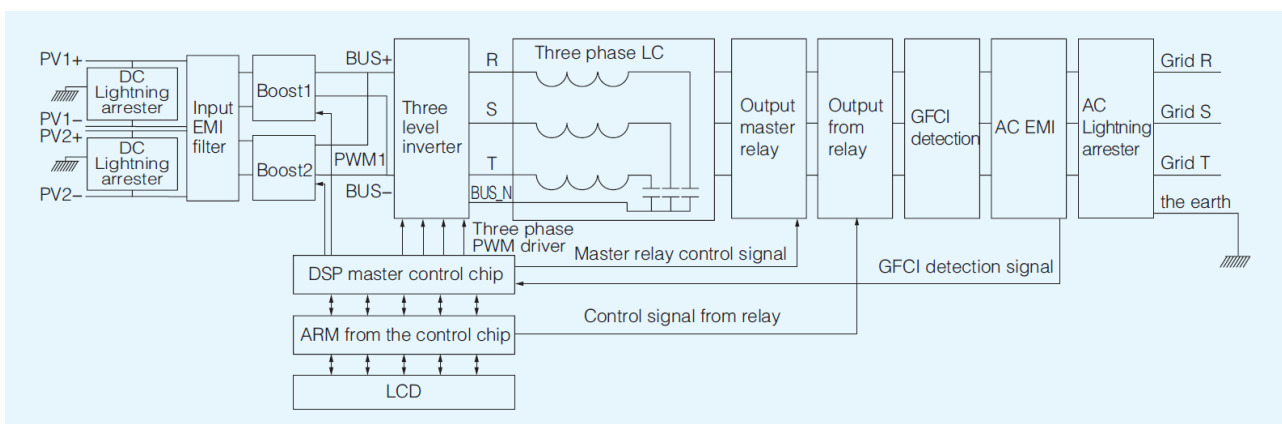
### Ledande teknik på svenska

- Stor spänningsvidd på Dc-sidan
- Effektivitet på 98.5%
- Integrerad DC-switch
- Fläktlös tyst design
- IP65 klassad
- 25 års beräknad livslängd
- Dubbla MPPT, går att så ihop mjukvarumässigt
- Svensk meny, portal och APP (android & Iphone)
- Svensk service och support, utbytesgaranti 5 år
- Lätt design, hela chassit i aluminium
- Transformatorlös och låg vikt
- Passar alla typer av el-solmoduler

### Effektivitetskurva



### Förenklat diagram på växelriktaren



## Technical specifications

DATASHEET	LT 5HD	LT 8HD	LT 10HD	LT 15HD	LT 20HD
<b>INPUT DATA (DC)</b>					
Max. recommended PV power	6000W	9000W	11000W	16000W	22000W
Max. recommended PV power / MPPT	3000W	4500W	5500W	7500W	11000W
Max. DC voltage	1000Vdc				
Start voltage	250Vdc				
PV voltage range	250-800Vcd			250-1000Vdc	
MPP work voltage range	250-800Vcd			250-800Vdc	
Full load DC voltage range	250-800Vdc	400-800Vdc			
Max. input current	22A	24A		60A	70A
Max. input current / MPP	11.A	12A		30A	35A
Number of MPP trackers / strings / MPP tracker	2 / 2			2 / 3	
<b>OUTPUT (AC)</b>					
Rated AC output power	5000W	8000W	10000W	15000W	20000W
Max. AC apparent power	5000VA	8000VA	10000VA	15000VA	20000VA
Max. output current / Phase	8,1A	13A	16,2A	24,3A	32,3A
AC nominal voltage / range	240VAC / 180-280VAC	240VAC / 180-280VAC	240VAC / 180-280VAC	240VAC / 180-280VAC	240VAC / 180-280VAC
AC grid frequency / range	50Hz / 45Hz-65Hz	50Hz / 45Hz-65Hz	50Hz / 45Hz-65Hz	50Hz / 45Hz-65Hz	50Hz / 45Hz-65Hz
Power factor	0,8....1.....0,8c				
THID	Less than 3%. (at ratid output power)				
AC grid connection type	3/N/PE Plug and play terminal (C16 / 3)				
<b>EFFICIENCY</b>					
Max. Efficiency	98,0 %	98,3 %	98,3 %	98,5 %	98,5 %
Euro-eta	98,1 %	97,8 %	98,1 %	97,8 %	97,8 %
MPPT Efficiency	99,8 %	99,8 %	99,8 %	99,9 %	99,9 %
<b>PROTECTION DEVICES</b>					
DC reverse polary protection	Yes				
DC Switch for each MPP	opt				
Output over current protection	Yes				
Output overvoltage protection-varistor	Yes				
Ground fault monitoring	Yes				
Grid monitoring	Yes				
Integrated all-pole sensitive leakage current monitoring	Yes				
<b>GENERAL DATA</b>					
Dimensions (W/H/D)	400 x 480 x 250 mm			476 x 575 x 265 mm	
Weight	25 KG			45 KG	
Operation temperature range	-25°C to +60°C				
Noise emission (typical)	≤ 30dB (A)				
Altitude	2000 m				
Self-Consumption (night)	0W				
Topology	Transformless				
Cooling concept	Natural				
Environmental Protection Rating	IP65				
Cooling mode	Still air cooling				
Relative temperature	0%-98% No condensation				
<b>FEATURES</b>					
DC connection	MC4				
Display	LCD, LED				
Interfaces: USB / WIFI / RS485 / GPRS	Yes / Yes / Yes / opt				
Warranty: 5 years / 10 years	Yes / opt				
<b>CERTIFICATES AND APPROVALS</b>					
Safety standards	EN 62109, AS/NZS3100, EN 50438 <a href="http://www.windon.se">www.windon.se</a>				
EMC (Electro Magnetic Compatibility) standards	EN61000-6-1,EN61000-6-2,EN61000-6-3,EN61000-6-4,EN61000-3-11,EN61000-3-12,				
Grid Standards	VDE-AR-4105,VDE0126-1-1,G59/2,AS4777,CQC				