Bulletin 1606-XLB Basic Power Supply

Cost-Effective, Efficient Power for Control Circuits



Features and Benefits

- Available in 1.5A (36 Watts), 2.5A (60 Watts), 3.75A (90 Watts), 5A (120 Watts), 10A (240 Watts) and 20A (480 Watts) sizes
- Designed for extended mean time between failure for longer service – at a significant price advantage
- Clever single-board design enables up to 95.2% efficiency, reducing heat output which can putting less thermal stress on other components in the enclosure
- DC-OK signal allows monitoring of unit's output voltage
- Clicks smoothly onto any standard DIN rail and features large-sized terminals, making wiring easier



1606-XLB36EH 1.5A (36 W) Push-in Terminals



1606-XLB90EQ 3.8A (90 W) NEC Class 2 Screw Terminals



1606-XLB90EH 3.8A (90 W) Push-in Terminals



1606-XLB480E 20A (480 W) Screw terminals

Basic DIN Rail Mounted Power Supplies

Bulletin 1606-XLB offers reliability and efficiency usually available only in more expensive power supplies.

These power supplies are rated up to 1.37 million hours mean time between failure (MTBF) and the minimum service life-time is typically 47,000 hours. Efficiency figures range from 90.7% up to 95.2%. Furthermore, the XLB family offers a DC "OK" signal that can be used to monitor the unit's output voltage.

Robust enough for demanding applications, these convection cooled units can operate from -10 C° (some units -25 °C) up to 70 °C. Typically, power derating is only required above 55 °C. The XLB family is easy to mount on any standard DIN rail and features large-sized terminals for east wiring. The 240 W version is only 49 mm wide, an industry leading space saving benefit of XLB.

The new 1606-XLB product family is cost-effective without compromising reliability, efficiency and ease of application.



Introducing new 1606-XLB family of power supplies with high efficiency and life expectancy

	36W 60W		90W		120W	240W	480W	
	XLB36EH	XLB60BH	XLB60EH XLB60E	XLB90EH	XLB90E XLB90EQ ²	XLB120E	XLB240E	XLB480E
Output								
Output current, nominal	1.5A	5A	2.5A	3.8A	3.8A	5A	10A	20A
Output voltage, nominal DC	24V	12V	24V	24V	24V	24V	24V	24V
output voltage range	24-28V	12-15V	24-28V	24-28V	24-28V	24-28V	24-28V	24-28V
Hold-up time, typ. at 230V _{ac}	161ms	114ms	113ms	119ms	119ms	50ms	32ms	27ms
Input AC input voltage, nominal	100-240V	100-240V	100-240V	100-240V	100-240V	100-120V ¹⁾ 200-240V ¹⁾	100-240V	100-240V
AC input voltage range	90-264V	90-264V	90-264V	90-264V	90-264V	90-132V ¹⁾ 180-264V ¹⁾	90-264V	90-264V
Power factor, typ.	0.46	0.49	0.47	0.45	0.45	0.54	0.93	0.97
Input inrush current, typ. AC (+40°C)	TBD	31A	35A	40A	40A	33A	26A	35A
Operational temperature range	-10°C to +70°C	-10°C to +70°C	-10°C to +70°C	-10°C to +70°C	-10°C to +70°C	-10°C to +70°C	-25°C to +70°C	-25°C to +70°C
Efficiency	> 90%	90.7%	91.8%	93.8%	93.8%	92.3%	95.2%	95.3%
MTBF SN 29500, IEC61709 at +40°C	TBD	TBD	TBD	TBD	TBD	1379kh	822kh	704 kh
Minimum lifetime expectancy at +40°C and 100% load	115 kh 100Vac	89 kh 100Vac	115 kh 100Vac	102 kh 100Vac	102 kh 100Vac	83kh	74kh	102kh
Mechanical data								
Dimensions WxHxD	22.5x90x91mm	36x90x91mm	36x90x91mm	36x90x91mm	36x90x91mm	39x124x124mm	49x124x124mm	59x124x127mm
Weight	138g	225g	220g	270g	270g	370g	540g	810g
DC-OK relay contact	-	-	-	-	-	yes	yes	yes
Connection terminals	push-in	push-in	XLB60EH : push-in XLB60E: screw	push-in	screw	screw	screw	screw

Standards and approvals

CE CU ISTED US CB Scheme EFFE

Annotations

1)Auto-select 2) NEC Class 2 version 3)1606-XLB36EH, 1606-XLB60BH, 1606-XLB60BH / 1606-XLB60E, 1606-XLB90EH / 1606-XLB90E / 1606-XLB90EQ, 1606-XLB480E, All values are valid at 230 Vac, 50Hz, +25°C ambient temperature after a warm-up time of 5 minutes, unless stated otherwise. All technical data is subject to change without notice.

General data for all versions:

Power reduction Humidity Installation height (with derating) Shock test 2.5%/°C from +55°C (PIC480.241C: 1.7%/°C) 5% to 95% r.h. 0 to 2,000m (up to 5,000m) 30g 6ms, 20g 11ms in accordance with IEC60068-2-27

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