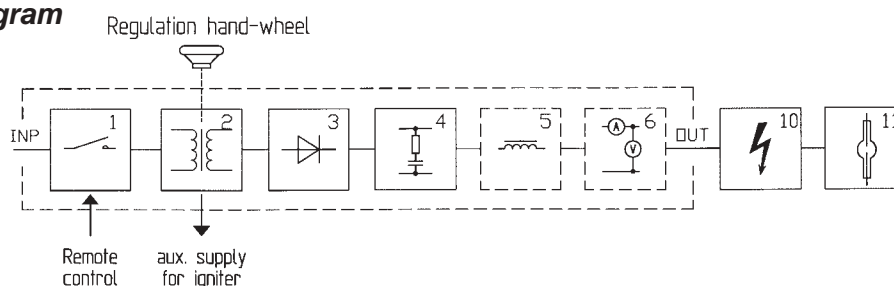


N3 series

Introduction

A complete range of high quality **rectifier power supplies** expressly designed to ensure correct operation and long life of short arc Xenon lamps from 700 to 15000W. N3 rectifiers, developed to meet the recommendations of Xenon lamp manufacturers, are fitted with special **IREM** transformers with adjustable magnetic shunt for continuous output regulation over the entire operating range. Their new and peculiar design guarantees a low acoustical noise, i.e. less than 55db(A)*. Furthermore, they are designed for continuous duty at ambient temperature of 40°C and are equipped with on-off control switch, three terminals for the ON/OFF control, and two terminals to provide the supplying to the igniter when the unit is ON.

Block diagram



- | | |
|--|---|
| 1) Remote control switch | 5) Auxiliary filter (AF - optional on N3-50, N3-80, N3-100) |
| 2) Transformer with adjust. magnetic shunt | 6) Voltmeter and ammeter (optional-suffix/A) |
| 3) Silicon diodes | 10) Igniter |
| 4) Filter and inrush current limiter | 11) Lamp |

Model	Lamp power range [W] (approx.)	DC output current range [A]	DC output voltage range [V]	No-load voltage range** [V]	Pk to pk current ripple (with AF)	Pk to pk current ripple (without AF)	Max. input apparent power [VA]	Efficiency
N3-50	700 - 1000	30 - 55	16 - 28	84 - 87	<3%	<8%	3000	>0,8
N3-80	1600 - 2000	43 - 85	21 - 35	107 - 109	<3%	<8%	5800	>0,8
N3-100	2000 - 3000	52 - 110	28 - 36	106 - 112	<3%	<8%	6900	>0,8
N3-150	3000 - 5000	80 - 150	28 - 40	108 - 112	<3%	-	9400	>0,8
N3-180	5000 - 7000	110 - 165	28 - 48	115 - 122	<3%	-	13000	>0,8
N3-200	7000 - 10000	110 - 210	36 - 55	150 - 157	<3%	-	21000	>0,8
N3-400	15000***	400	37	127	<3%	-	33000	>0,8

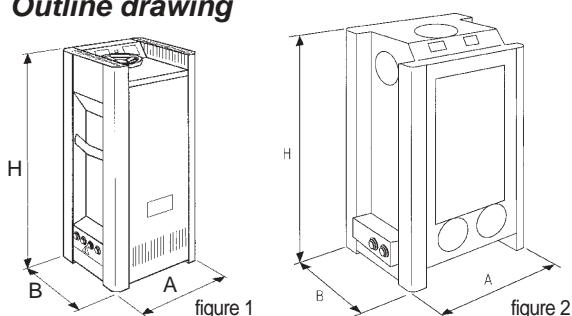
For more detailed information on voltage range see on relevant technical data.

* Measurement made in open space at 1 m distance.

** No-load voltage range at min. input voltage measured 0.5 s after switching on

***water-cooled lamps

Outline drawing



Models	Figure	Dimensions [mm]			Weight with AF [kg]	Weight without AF [kg]
		A	B	H		
N3-50	1	410	350	840	101	80
N3-80	1	410	350	840	122	101
N3-100	1	460	410	940	148	127
N3-150	1	460	410	940	154	-
N3-180	1	460	410	940	175	-
N3-200	1	460	410	1040	207	-
N3-400	2	660	530	1100	420	-

N3 series - technical data

MODEL / TECHNICAL DATA	N3-50					N3-80				
	INPUT DATA	400 380-440 50 48-52 3000 4.3	220 208-242 50 48-52 3000 7.9	415 394-456 50 48-52 3000 4.2	220 208-230 60 57-63 3000 7.9	200 190-220 50/60 48-63 3000 8	400 380-440 50 48-52 5800 8.4	220 208-242 50 48-52 5800 15.2	415 394-456 50 48-52 5800 8.1	220 208-230 60 57-63 5800 15.2
OUTPUT DATA	87 16-28 30-55 700-1000 <3 <8 >0.8 A / V provided fuse	84 16-28 30-55 700-1000 <3 <8 >0.8 A / V provided fuse	84 16-28 30-55 700-1000 <3 <8 >0.8 A / V provided fuse	84 16-28 30-55 700-1000 <3 <8 >0.8 A / V provided fuse	84 16-28 30-55 700-1000 <3 <8 >0.8 A / V provided fuse	107 21-35 43-85 1600-2000 <3 <8 >0.8 A / V provided fuse	109 21-35 43-85 1600-2000 <3 <8 >0.8 A / V provided fuse	107 21-35 43-85 1600-2000 <3 <8 >0.8 A / V provided fuse	109 21-35 43-85 1600-2000 <3 <8 >0.8 A / V provided fuse	109 21-35 45-85 1600-2000 <3 <8 >0.8 A / V provided fuse
Safety standards	UL122 EN60439-1									
EMC standards	EN 61547									
Markings	CE									
Degree of protection	UL									
Isolation class	IP20									
Storage temperature [°C]	CL1									
Operating temperature [°C]	-20 to +60									
Cooling	0 to +40									
Dimensions AxBxH [mm]	free convection									
Weight [kg]	410 x 350 x 840									
Mounting position	80 (without AF) - 101 (with AF) vertical									
Suggested igniter	AS-8030 - ASN-700A AS-16040A									

** 0.5 seconds after switching on
italics data means tentative data
 Output instruments: A = ammeter - V = voltmeter
 Different input voltages or frequencies are available on request.

N3 series - technical data

MODEL / TECHNICAL DATA	N3-100						N3-150					
	INPUT DATA	400 380-440 50 48-52 6900 10	220 208-242 50 48-52 6900 18.1	415 394-456 50 48-52 6900 9.6	220 208-230 60 57-63 6900 18.1	200 190-220 50/60 48-63 6900 19.9	400 380-440 50 48-52 9400 13.6	220 208-242 50 48-52 9400 24.7	415 394-456 50 48-52 9400 13.1	220 208-230 60 57-63 9400 24.7	200 190-220 50/60 48-63 9400 27.1	
OUTPUT DATA												
No-load voltage at min. input voltage ** [V]	112	106	111	109	104	112	108	108	110	107		
DC output voltage range [V]	28-36	28-36	28-36	28-36	28-36	28-40	28-40	28-40	28-40	28-40		
DC output current range [A]	52-110	52-110	52-110	52-110	52-170	80-150	80-150	80-150	80-150	80-150		
Lamp power range [W] (approx.)	2000-3000	2000-3000	2000-3000	2000-3000	2000-3000	3000-5000	3000-5000	3000-5000	3000-5000	3000-5000		
Peak-to-peak current ripple [%] . with AF . without AF	<3 <8 >0.8	<3 <8 >0.8	<3 <8 >0.8	<3 <8 >0.8	<3 <8 >0.8	<3 <8 >0.8	<3 <8 >0.8	<3 <8 >0.8	<3 <8 >0.8	<3 <8 >0.8		
Efficiency	>0.8	>0.8	>0.8	>0.8	>0.8	>0.8	>0.8	>0.8	>0.8	>0.8		
Output instruments	A / V	A / V	A / V	A / V	A / V	A / V	A / V	A / V	A / V	A / V		
Aux. supply	provided fuse	provided fuse	provided fuse	provided fuse	provided fuse	provided fuse	provided fuse	provided fuse	provided fuse	provided fuse		
Aux. supply protection												
Safety standards	CE	CE	CE	UL	CE	CE	CE	CE	UL	CE		
EMC standards	UL122 EN60439-1	UL122 EN60439-1	EN 61547	UL	CE	CE	CE	CE	UL	CE		
Markings	EN 61547	EN 61547	EN 61547	IP20 CL1	IP20 CL1	IP20 CL1	IP20 CL1	IP20 CL1	IP20 CL1	IP20 CL1		
Degree of protection	-20 to +60	-20 to +60	-20 to +60	-20 to +60	-20 to +60	-20 to +60	-20 to +60	-20 to +60	-20 to +60	-20 to +60		
Isolation class	free convection	free convection	free convection	free convection	free convection	free convection	free convection	free convection	free convection	free convection		
Storage temperature [°C]	460 x 410 x 940	460 x 410 x 940	460 x 410 x 940	460 x 410 x 940	460 x 410 x 940	460 x 410 x 940	460 x 410 x 940	460 x 410 x 940	460 x 410 x 940	460 x 410 x 940		
Operating temperature [°C]	127 (without AF) - 148 (with AF)	127 (without AF) - 148 (with AF)	127 (without AF) - 148 (with AF)	127 (without AF) - 148 (with AF)	127 (without AF) - 148 (with AF)	127 (without AF) - 148 (with AF)	127 (without AF) - 148 (with AF)	127 (without AF) - 148 (with AF)	127 (without AF) - 148 (with AF)	127 (without AF) - 148 (with AF)		
Cooling	vertical	vertical	vertical	vertical	vertical	vertical	vertical	vertical	vertical	vertical		
Dimensions AxBxH [mm]	ASN-700/A AS-16040A	ASN-700/A AS-16040A	ASN-700/A AS-16040A	ASN-700/A AS-16040A	ASN-700/A AS-16040A	ASN-700/A AS-16040A	ASN-700/A AS-16040A	ASN-700/A AS-16040A	ASN-700/A AS-16040A	ASN-700/A AS-16040A		
Weight [kg]												
Mounting position												
Suggested igniter												

** 0.5 seconds after switching on
italics data means tentative data
 Output instruments: A = ammeter - V = voltmeter
 Different input voltages or frequencies are available on request.

