MADE IN POLAND

HPL450LED MINI

EXEMPLARY APPLICATIONS

INDUSTRY BUILDINGS

WAREHOUSES

PRODUCTION LINES

PASSAGEWAYS

Industrial, compact floodlight with high-lumen LED modules providing up to 10,810 lm.
The luminaire can be equipped with one of six optical systems.

Optionally, the floodlight can be adapted for operation with a central battery system **ZB** and equipped with a power supply supporting the DALI-2 and D4i protocols for the **DA** version.
Additionally, the luminaire can be fitted with a wireless communication module for the Thread® **WDA** network or adapted for use in a three-phase **3F** system.

FEATURES

MECHANICAL PARAMETERS

housing	anodized aluminum (ALU)
diffuser	tempered glass (GL) polycarbonate (PC)
ingress protection	IP66, IP67
protection class	I
shock resistance	**GL:** IK09 **PC:** IK10
mounting	on the bracket or suspended
mounting accessories	check: *mountings*
suspended mounting	adapted for suspended mounting
wires between the fitting modules	halogen-free high temperature resistant silicone wires

WORK PARAMETERS

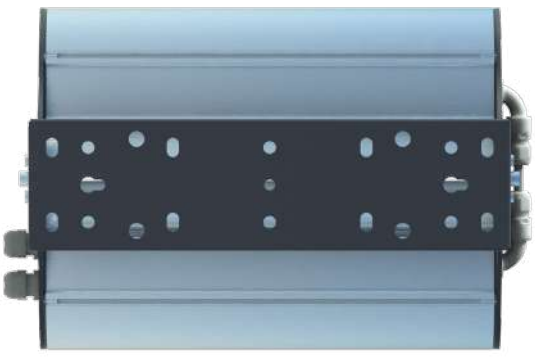
ambient temperature	-40°C to max +55°C *check: types comparison*
lifetime	>50.000h L_{80} B_{10} >80.000h L_{70} B_{10} >100.000h L_{70} B_{50}

ELECTRICAL PARAMETERS

0,5÷4,0 mm² 2,5÷6,0 mm² - *optionally*	connection terminals
202-254V, 50-60 Hz, 168-275V, 0 Hz voltage ± 10%	input voltage 35E
100-199V, 50-60 Hz, 127-300V, 0 Hz	input voltage 25E
heavy-duty industrial LED modules	light source
>0,95	power factor
THD < 9%	total harmonic distortion
Ø20 (wire 6-13mm) Ø25 - option (wire 9-17mm)	cable inlets
L-N: 6kV, L-PE: 10kV	overvoltage protection

PHOTOMETRICAL PARAMETERS

>70 >80 - *optionally*	CRI
4000K 3000K - *optionally* 5000K - *optionally* 6500K - *optionally*	color temperature
≤3 SDCM	color tolerance (MacAdam)
SVM < 0,4 *due to IEC TR 61547-1:2020*	flicker
PstLM < 1 *due to IEC TR 61547-1:2020*	flicker index



TYPES COMPARISON

POWER SUPPLY 35E (202-254V, 50-60 Hz | 168-275V, 0 Hz)

TYPE	LUMINOUS FLUX* [lm]	POWER CONSUMP. [W]	EFFICIENCY [lm/W]	AMBIENT TEMP. [°C]
HPL450LED-HB2-1	3285	19,8	166	- 40°C ÷ +55
HPL450LED-HB2-2	5756	35,1	164	- 40°C ÷ +50
HPL450LED-HB2-3	8023	50,7	158	- 40°C ÷ +45
HPL450LED-HB2-4	10133	67,4	150	- 40°C ÷ +40

* - Luminous flux is indicated for CRI 70 LEDs and MB optics.

POWER SUPPLY 25E (100-199 V, 50-60 Hz | 127-300V, 0 Hz)

TYPE	LUMINOUS FLUX* [lm]	POWER CONSUMP. [W]	EFFICIENCY [lm/W]	AMBIENT TEMP. [°C]
HPL450LED-HB2-2	5756	35,1	164	- 40°C ÷ +50
HPL450LED-HB2-3	8023	50,7	158	- 40°C ÷ +45
HPL450LED-HB2-4	10133	67,4	150	- 40°C ÷ +40

* - Luminous flux is indicated for CRI 70 LEDs and MB optics.

Luminous flux tolerance +/- 10%
Power tolerance +/- 5%
The parameters given in the following data sheet has been determined for the temperature Ta=25°C.

Luminous flux, light intensity distribution and efficiency has been tested on the basis of the standards EN ISO 17025:2005, norm series EN13032 and LM-79.

The actual data and General Warranty Conditions are available on our website **www.atmlighting.pl**

MAXIMUM NUMBER OF LUMINAIRES CONNECTED IN A LINE DEPENDING ON THE CIRCUIT BREAKERS USED

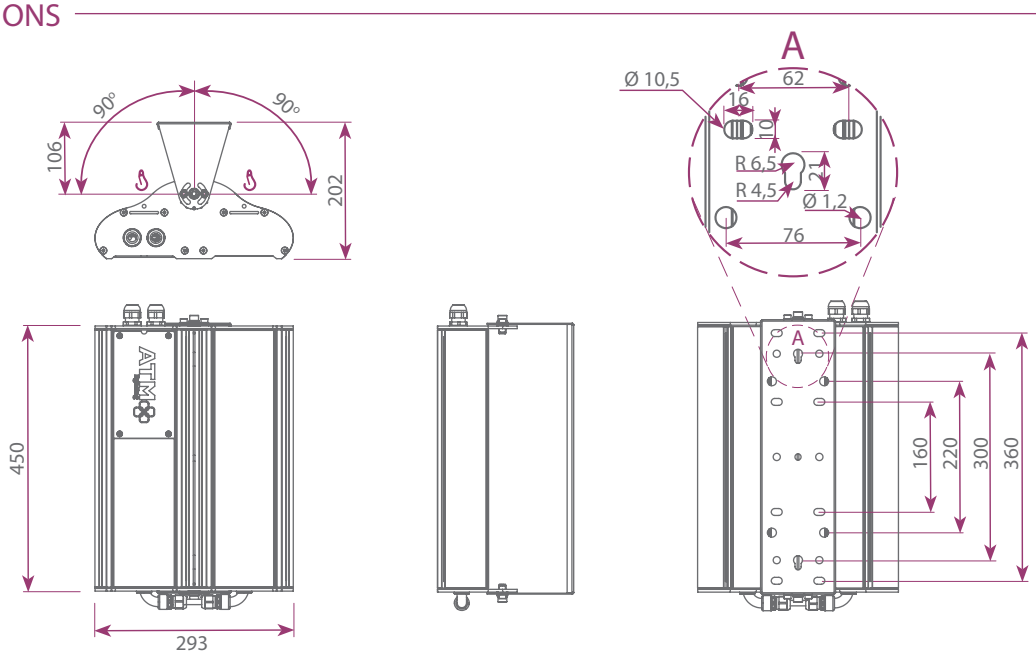
POWER SUPPLY 35E

TYPE	B16	C16	Max. start current	Starting time
HPL450LED-HB1	26	44	21A	< 225µs
HPL450LED-HB2/3/4	14	23	65A	< 156µs

POWER SUPPLY 25E

TYPE	B16	C16	Max. start current	Starting time
HPL450LED-HB2	13	15	33,8A	< 164µs

DIMENSIONS



OPTIONAL EQUIPPMENT

Central battery:
Version compatible with a central battery system **ZB**

Emergency luminous flux: 100% (HB2-2/3/4) or 50% (HB2-1).

DALI-2 driver:
Version equipped with an integrated driver with DALI-2 and D4i interface **DA**

The DA version is equipped with an integrated driver with a DALI-2 interface, enabling luminaire operation monitoring and lighting control using data directly from motion sensors or a building management system (BMS). A properly configured lighting control system can significantly reduce electricity costs and improve user ergonomics. The DA version luminaire does not include an emergency power module. The functionality of the DALI-2 driver can be extended with D4i (DALI for Internet of Things) for the HB2-2/3/4 versions, allowing for the collection and storage of luminaire operational data and supporting an enhanced resource management and performance monitoring system.

3-phase network:
Optional version adapted for three-phase power supply (max. voltage 277 V) **3F**

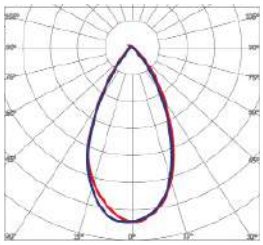
Remote control:
Optional version equipped with a wireless communication module for the Thread® network **WDA**

WARNING! A luminaire equipped with the WDA module, regardless of the diffuser material selected, should not be used in environments exposed to oil, acetone, chlorine, ethyl compounds, ether, or solvents.

PHOTOMETRY

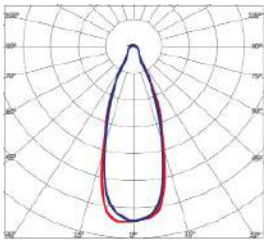
STANDARD

MB (Medium Beam)
FWHM/FWTM: 57.0°/91.0°

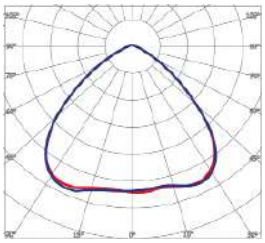


OPTIONALLY

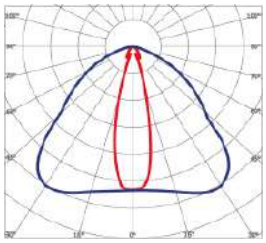
NB (Narrow Beam)
FWHM/FWTM 38.0°/ 68.0°



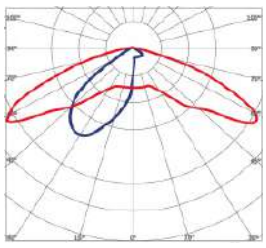
WB (Wide Beam)
FWHM/FWTM: 100.0°/125.0°



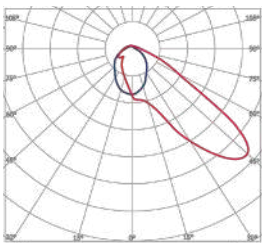
OB (Oval Beam)
FWHM/FWTM: 25.0°/95.0°



ASY1 (Asymetric Beam)
FWHM: Asymmetric

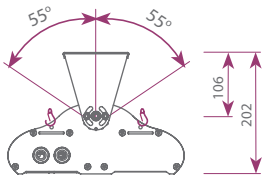


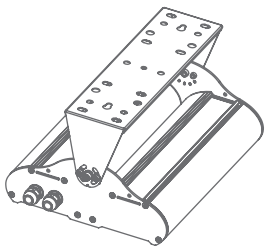
ASY2 (Asymetric Beam)
FWHM: Asymmetric



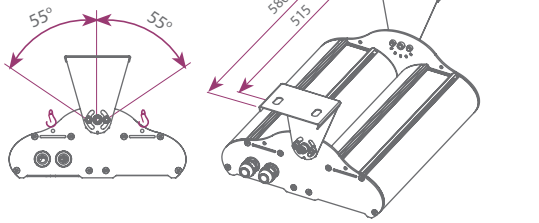
MOUNTINGS

standard
AMO90

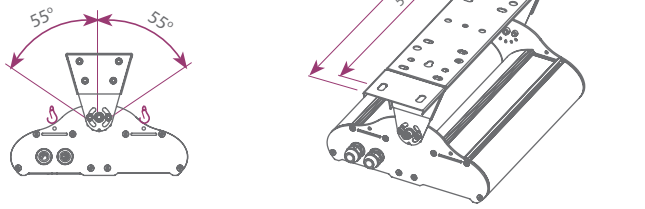




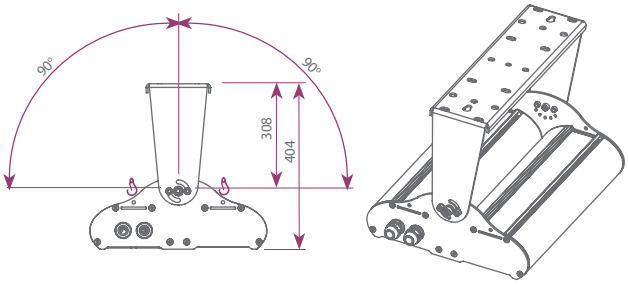
AMO45



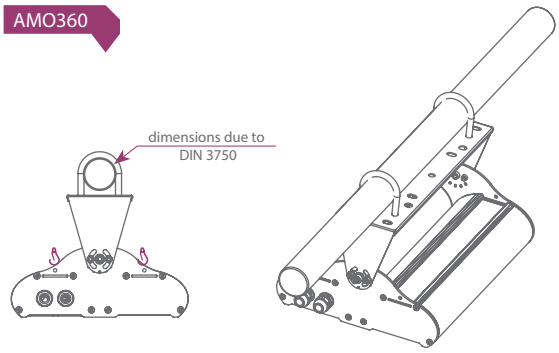
AMO90S



AMO180



AMO360



Suspended mounting:
By default, the luminaire is equipped with four mounting holes Ø5 mm, allowing it to be suspended.

CONFIGURATIONS

H	P	L	4	5	0	L	E	D	-	H	B	2	-	-	35E	-	30	-	20	P	20	-
													1		25E		50		10	M	25	
													2				70					
													3									
													4									

ALU	-		-	MB	-		-		-		-	AMO90
		GL		NB		ZB		DA		3F		AMO45
		PC		WB				WDA				AMO90S
				OB								AMO180
				ASY1								AMO360
				ASY2								

LED modules type

LED modules quantity

driving current

power supply
35E - 202-254V, 50-60Hz; 168-275V 0Hz,
25E - 100-199V, 50-60Hz; 127-300V 0Hz

wiring
30 - single 3-pole terminal → 3
50 - single 5-pole terminal → 5
70 - single 7-pole terminal → 7

cable inlets - quantity
10 - one cable inlet on the side of the housing → 1 0
20 - two cable inlets on the side of the housing → 2 0

cable inlets - material
M - metal
P - plastic

cable inlets - size
20 - Ø20
25 - Ø25

housing material
ALU - anodized aluminum

diffuser material
GL - tempered glass
PC - UV stabilised polycarbonate

optics
check: *distribution curves*

version ZB
version adapted to work with central battery

optional equippment
DA - version equipped with integrated driver with DALI-2 and D4i interface
WDA - version equipped with wireless Thread® network connection

version 3F
version adapted to work in a three-phase network, equipped with connectors 5x2,5mm² (L1, L2, L3, PE, N). Wiring 70.

mountings
check: *mountings*

DOWNLOADS

LDT