## **PHILIPS** Lighting



### Maxos LED inserts for TTX400

#### 4MX400 581 LED40S/830 PSD WB WH

Maxos LED Retrofit for TTX400, LED module, system flux 4000 lm, 830 warm white, Power supply unit with DALI interface, Wide beam, White

Customers in the industrial and retail sectors are looking for general lighting solutions with a justifiable payback, while meeting all relevant norms for supermarkets and industry applications. For a limited investment, Maxos LED inserts for TTX400 offer best-in-class energy savings while delivering high lux levels at the required color temperatures and glare factors. The minimalistic Maxos LED inserts for TTX400 comprise exchangeable mid-power LED boards to be mounted on a standard TTX400 trunking rail. A choice of wide, medium and double asymmetric beam lenses means flexibility in light distribution. Compared with a conventional fluorescent installation, this highly efficient LED solution offers full payback in less than three years. And the benefits keep coming: our upgradable LED engine platform makes Maxos LED inserts for TTX400 a truly future-proof solution.

#### **Product data**

# General Information Lamp family code LED40S [LED module, system flux 4000 lm] Light source replaceable No Number of gear units 1 unit Gear Driver included Yes Remarks \*-Per Lighting Europe guidance paper "Evaluating performance of LED based luminaires - January 2018": statistically there

	is no relevant difference in lumen
	maintenance between B50 and for example
	B10. Therefore, the median useful life (B50)
	value also represents the B10 value.
Service tag	Yes
Product family code	4MX400 [Maxos LED Retrofit for TTX400]
Lighting Technology	LED
Value ladder	Performance
CE mark	Yes

#### Maxos LED inserts for TTX400

Warranty period5 yearsFlammability mark-ENEC markENEC markGlow-wire testTemperature 650 °C, duration 30 sEU RoHS compliantYesLight Technical-Luminous Flux3,800 lmCorrelated Color Temperature (Nom)3000 KLuminous Efficacy (rated) (Nom)158 lm/WColor rendering index (CRI)>80Number of light sources1Beam angle of light source120 degree(s)Light typeWide beamOptical cover typePolymethyl methacrylate bowl/coverLuminaire light beam spread90°Unified glare rating CENNot applicableOperating and Electrical-Input Voltage220-240 VLine Frequency50 to 60 HzInrush current21 AInrush time0.28 msPower Consumption24 WPower Factor (Fraction)0.97ConnectionConnection unit 5-poleCable-Number of products on MCB of 16 A type24	Mowe where a suite of	E vere	
ENEC markENEC markGlow-wire testTemperature 650 °C, duration 30 sEU RoHS compliantYesLight TechnicalImage: Comperature (Nom)Luminous Flux3,800 lmCorrelated Color Temperature (Nom)3000 KLuminous Efficacy (rated) (Nom)158 lm/WColor rendering index (CRI)≥80Number of light sources1Beam angle of light source120 degree(s)Light source color830 warm whiteOptic typeWide beamOptical cover typePolymethyl methacrylate bowl/coverLuminaire light beam spread90°Unified glare rating CENNot applicableOperating and ElectricalInput VoltageInput Voltage220-240 VLine Frequency50 to 60 HzInrush current21 AInrush time0.28 msPower Consumption24 WPower Factor (Fraction)0.97Connection unit 5-poleCable-Number of products on MCB of 16 A type2424	Warranty period	5 years	
Glow-wire testTemperature 650 °C, duration 30 sEU RoHS compliantYesLight TechnicalLuminous Flux3.800 lmCorrelated Color Temperature (Nom)3000 KLuminous Efficacy (rated) (Nom)158 lm/WColor rendering index (CRI)≥80Number of light sources1Beam angle of light source120 degree(s)Light typeWide beamOptical cover typePolymethyl methacrylate bowl/coverLuminaire light beam spread90°Unified glare rating CENNot applicableOperating and Electrical220-240 VInrush current21 AInrush time0.28 msPower Consumption24 WPower Factor (Fraction)0.97Connection unit 5-pole-Cable-Number of products on MCB of 16 A type24		-	
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Light TechnicalLuminous Flux3,800 lmCorrelated Color Temperature (Nom)3000 KLuminous Efficacy (rated) (Nom)158 lm/WColor rendering index (CRI)≥80Number of light sources1Beam angle of light source120 degree(s)Light source color830 warm whiteOptic typeWide beamOptical cover typePolymethyl methacrylate bowl/coverLuminaire light beam spread90°Unified glare rating CENNot applicableOperating and ElectricalInput VoltageInrush current21 AInrush time0.28 msPower Consumption24 WPower Factor (Fraction)0.97ConnectionConnection unit 5-poleCable-Number of products on MCB of 16 A type24	Glow-wire test	Temperature 650 °C, duration 30 s	
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Luminous Flux3,800 lmCorrelated Color Temperature (Nom)3000 KLuminous Efficacy (rated) (Nom)158 lm/WColor rendering index (CRI)≥80Number of light sources1Beam angle of light source120 degree(s)Light source color830 warm whiteOptic typeWide beamOptical cover typePolymethyl methacrylate bowl/coverLuminaire light beam spread90°Unified glare rating CENNot applicableOperating and ElectricalInput VoltageInrush current21 AInrush current21 AInrush time0.28 msPower Consumption24 WPower Factor (Fraction)0.97ConnectionConnection unit 5-poleCable-Number of products on MCB of 16 A type24			
Correlated Color Temperature (Nom)3000 KLuminous Efficacy (rated) (Nom)158 lm/WColor rendering index (CRI)≥80Number of light sources1Beam angle of light source120 degree(s)Light source color830 warm whiteOptic typeWide beamOptical cover typePolymethyl methacrylate bowl/coverLuminaire light beam spread90°Unified glare rating CENNot applicableOperating and ElectricalInput VoltageInput Voltage220-240 VLine Frequency50 to 60 HzInrush current21 AInrush time0.28 msPower Consumption24 WPower Factor (Fraction)0.97ConnectionConnection unit 5-poleCable-Number of products on MCB of 16 A type24	Light Technical		
Luminous Efficacy (rated) (Nom)158 lm/WColor rendering index (CRI)≥80Number of light sources1Beam angle of light source120 degree(s)Light source color830 warm whiteOptic typeWide beamOptical cover typePolymethyl methacrylate bowl/coverLuminaire light beam spread90°Unified glare rating CENNot applicableOperating and ElectricalInput VoltageInrush current21 AInrush current21 AInrush time0.28 msPower Consumption24 WPower Factor (Fraction)0.97ConnectionConnection unit 5-poleCable-Number of products on MCB of 16 A type24	Luminous Flux	3,800 lm	
Color rendering index (CRI)       ≥80         Number of light sources       1         Beam angle of light source       120 degree(s)         Light source color       830 warm white         Optic type       Wide beam         Optical cover type       Polymethyl methacrylate bowl/cover         Luminaire light beam spread       90°         Unified glare rating CEN       Not applicable         Operating and Electrical       Input Voltage         Input Voltage       220-240 V         Line Frequency       50 to 60 Hz         Inrush current       21 A         Inrush time       0.28 ms         Power Consumption       24 W         Power Factor (Fraction)       0.97         Connection       Connection unit 5-pole         Cable       -         Number of products on MCB of 16 A type       24	Correlated Color Temperature (Nom)	3000 K	
Number of light sources1Beam angle of light source120 degree(s)Light source color830 warm whiteOptic typeWide beamOptical cover typePolymethyl methacrylate bowl/coverLuminaire light beam spread90°Unified glare rating CENNot applicableOperating and ElectricalInput VoltageInput Voltage220-240 VLine Frequency50 to 60 HzInrush current21 AInrush time0.28 msPower Consumption24 WPower Factor (Fraction)0.97ConnectionConnection unit 5-poleCable-Number of products on MCB of 16 A type24	Luminous Efficacy (rated) (Nom)	158 lm/W	
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Optic typeWide beamOptical cover typePolymethyl methacrylate bowl/coverLuminaire light beam spread90°Unified glare rating CENNot applicableOperating and ElectricalInput VoltageInput Voltage220-240 VLine Frequency50 to 60 HzInrush current21 AInrush time0.28 msPower Consumption24 WPower Factor (Fraction)0.97ConnectionConnection unit 5-poleCable-Number of products on MCB of 16 A type24	Beam angle of light source	120 degree(s)	
Optical cover type       Polymethyl methacrylate bowl/cover         Luminaire light beam spread       90°         Unified glare rating CEN       Not applicable         Operating and Electrical       Input Voltage         Input Voltage       220-240 V         Line Frequency       50 to 60 Hz         Inrush current       21 A         Inrush time       0.28 ms         Power Consumption       24 W         Power Factor (Fraction)       0.97         Connection       Connection unit 5-pole         Cable       -         Number of products on MCB of 16 A type       24	Light source color	830 warm white	
Luminaire light beam spread90°Unified glare rating CENNot applicableOperating and ElectricalInput VoltageInput Voltage220-240 VLine Frequency50 to 60 HzInrush current21 AInrush time0.28 msPower Consumption24 WPower Factor (Fraction)0.97ConnectionConnection unit 5-poleCable-Number of products on MCB of 16 A type24	Optic type	Wide beam	
Unified glare rating CENNot applicableOperating and ElectricalInput VoltageInput Voltage220-240 VLine Frequency50 to 60 HzInrush current21 AInrush time0.28 msPower Consumption24 WPower Factor (Fraction)0.97ConnectionConnection unit 5-poleCable-Number of products on MCB of 16 A type24	Optical cover type	Polymethyl methacrylate bowl/cover	
Operating and Electrical         Input Voltage       220-240 V         Line Frequency       50 to 60 Hz         Inrush current       21 A         Inrush time       0.28 ms         Power Consumption       24 W         Power Factor (Fraction)       0.97         Connection       Connection unit 5-pole         Cable       -         Number of products on MCB of 16 A type       24	Luminaire light beam spread	90°	
Input Voltage220-240 VLine Frequency50 to 60 HzInrush current21 AInrush time0.28 msPower Consumption24 WPower Factor (Fraction)0.97ConnectionConnection unit 5-poleCable-Number of products on MCB of 16 A type24	Unified glare rating CEN	Not applicable	
Input Voltage220-240 VLine Frequency50 to 60 HzInrush current21 AInrush time0.28 msPower Consumption24 WPower Factor (Fraction)0.97ConnectionConnection unit 5-poleCable-Number of products on MCB of 16 A type24			
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Inrush current21 AInrush time0.28 msPower Consumption24 WPower Factor (Fraction)0.97ConnectionConnection unit 5-poleCable-Number of products on MCB of 16 A type24	Input Voltage	220-240 V	
Inrush time0.28 msPower Consumption24 WPower Factor (Fraction)0.97ConnectionConnection unit 5-poleCable-Number of products on MCB of 16 A type24	Line Frequency	50 to 60 Hz	
Power Consumption     24 W       Power Factor (Fraction)     0.97       Connection     Connection unit 5-pole       Cable     -       Number of products on MCB of 16 A type     24	Inrush current	21 A	
Power Factor (Fraction)0.97ConnectionConnection unit 5-poleCable-Number of products on MCB of 16 A type24	Inrush time	0.28 ms	
Connection     Connection unit 5-pole       Cable     -       Number of products on MCB of 16 A type     24	Power Consumption	24 W	
Cable     -       Number of products on MCB of 16 A type     24	Power Factor (Fraction)	0.97	
Number of products on MCB of 16 A type 24	Connection	Connection unit 5-pole	
	Cable	-	
В	Number of products on MCB of 16 A type	24	
	В		

Housing Color	White
Optical cover finish	Clear
Overall length	1,528 mm
Overall width	63 mm
Overall height	50 mm
Dimensions (Height x Width x Depth)	50 x 63 x 1528 mm

Approval and Application		
Ingress protection code	IP20 [Finger-protected]	
Mech. impact protection code	IK02 [0.2 J standard]	
Sustainability rating	-	
Protection class IEC	Safety class I	

#### Initial Performance (IEC Compliant)

Luminous flux tolerance	+/-10%
Initial chromaticity	(0.43, 0.40) SDCM <3.5
Power consumption tolerance	+/-10%

#### Over Time Performance (IEC Compliant)

Control gear failure rate at median useful	5 %
life 50000 h	
Control gear failure rate at median useful	10 %
life 100000 h	
Lumen maintenance at median useful life*	L90
50000 h	
Lumen maintenance at median useful life*	L80
100000 h	

#### Application Conditions

Performance ambient temperature Tq	25 °C
Maximum dim level	1%
Suitable for random switching	Not applicable

#### **Product Data**

Order product name	4MX400 581 LED40S/830 PSD WB WH
Full product name	4MX400 581 LED40S/830 PSD WB WH
Full product code	403073266250099
Order code	66250099
Material Nr. (12NC)	910629124126
Numerator - Quantity Per Pack	1
EAN/UPC - Product/Case	4030732662500
Numerator - Packs per outer box	3
EAN/UPC - Case	4030732259519

Input Voltage	220-240 V
Line Frequency	50 to 60 Hz
Inrush current	21 A
Inrush time	0.28 ms
Power Consumption	24 W
Power Factor (Fraction)	0.97
Connection	Connection unit 5-pole
Cable	-
Number of products on MCB of 16 A type	24

-20 to +35 °C

Temperature

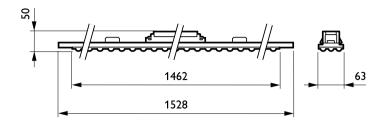
Ambient temperature range

Controls	and	Dimming

Dimmable	Yes
Driver/power unit/transformer	Power supply unit with DALI interface
Control interface	DALI
Constant light output	No
Mechanical and Housing	
Housing Material	Steel
Reflector material	-
Optic material	Polymethyl methacrylate
Optical cover material	Polymethyl methacrylate
Fixation material	Steel

#### Maxos LED inserts for TTX400

Dimensional drawing





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