HALOTRONIC®

Electronic transformers for 12 V halogen lamps
- Optimum lamp life
- Compact for small spaces
- Reversible switch off in case of short-circuits, overload and overtemperature
- Dimming on the primary side is possible. A corresponding dimmer has to be used (suitable dimmers see table)

Connecting the transformers to the lamps
- Ensure that the lamp load is within the output range of the transformers (see table)
- Transformers can be connected in parallel on the primary side (fig. 1a)
- Do not connect the transformers in parallel or series on the secondary side (fig. 1b)
- The maximum load of the transformer can be connected to any of the lamp-side terminal pairs (except HTL 225)

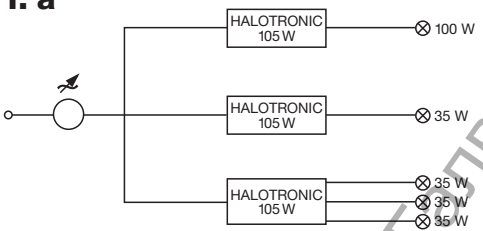
Wiring
- In accordance with the EN 60598 standard, the recommended connecting cables (see table) must be held firmly by the cable clamp to prevent it from being pushed or pulled
- Secondary side: cable length maximum 2 m, minimum 0.3 m (fig. 2 and 3)
- To prevent radio interference keep lamp cables as short as possible, keep them away from metal surfaces and keep them separated as far as possible from mains cables (fig. 2 and 3: angles ≥ 90°). Do not route cables along the transformers
- When using single leads of a cable, secondary wires have to be twisted in pairs
- For units installed in fixtures the luminaire manufacturer is responsible for RFI-compliance

Temperatures
- Avoid high temperatures. Do not place the transformers close to the lamp (minimum distance 0.3 m). Maximum permissible ambient temperature must not be exceeded (see table). Make sure there is adequate space to avoid a build-up of heat. In critical installations the temperature at t_c has to be controlled

Caution
- Transformers must be installed by a qualified electrician
- Electronic transformers are not suitable for any other load than low voltage halogen lamps
- No switching or dimming on secondary side

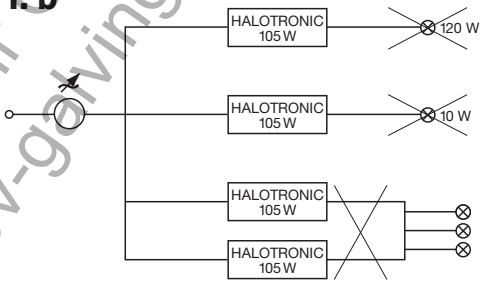
correct

1. a

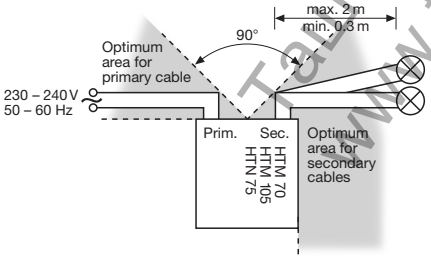


incorrect

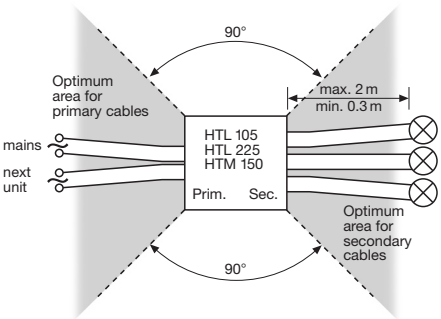
1. b



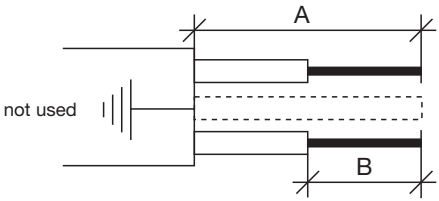
2.



3.



4. Wire stripping (see table)



OSRAM

HALOTRONIC®

C10238698 G10252879

		HTM 70/230-240	HTM 105/230-240	HTM 150/230-240
Nominal line voltage:		230 V – 240 V		
Operating voltage:		207 V – 254 V		
Safe operation:		207 V – 264 V		
Nominal line current:		0.27 A_{eff}	0.41 A_{eff}	0.57 A_{eff}
Line frequency:		50 – 60 Hz		
Output voltage (230 V):		11.2 V (70 W); 11.2 V (20 W)	11.3 V (105 W); 11.4 V (35 W)	11.4 V (150 W); 11.5 V (50 W)
Losses:		max. 4 W (70 W)	max. 6 W (105 W)	max. 7 W (150 W)
Load range:		20 W – 70 W	35 W – 105 W	50 W – 150 W
Standards:		EN 55015; EN 61000-3-2; EN 61547; EN 61047; IEC 61347		
Approvals:				
Temperature range:		0 °C to +50 °C	0 °C to +45 °C	
Max. inrush current for cold lamps:		0.3 A_{eff} (70 W)	1.0 A_{eff} (105 W)	1.1 A_{eff} (150 W)
Dimming:		trailing or leading edge phase control for inductive load dimmers		
Short circuit protection:		automat. switch off, reversible		
Overload protection:		automat. switch off, reversible		
Overheating protection:		automat. switch off, reversible		
Suitable cable types for primary side:		NYM(3x1.5) mm²; H05VV-F(3x0.75 – 3x1.5) mm² H05VV-F(2x0.75 – 2x1.5) mm²; H05VV-H2F(2x0.75 – 2x1.5) mm²		connection of 2 lines of the types NYM 3x1.5; H05VV-F(3x1.5 – 3x1.0)
Suitable cable types for secondary side:		NYM(3x1.5) mm² H05VV-F(3x0.75 – 3x1.5) mm² H05VV-F(2x0.75 – 2x1.5) mm² H05VVH2-F(2x0.75 – 2x1.5) mm² cable sheath cross section (6x3.5) mm² to (8x5) mm² same cable type recommended as used at primary side the sheath cross section must be equal to that of primary side		connection of **3 lines** of the types NYM 3x1.5; H05VV-F(2x1.5 – 2x0.75); H03VV-F(2x1.5 – 2x0.75) Halogen low voltage line 2x1.5; 2x2.5: cable sheath cross section (6x3.5) mm² to (9x6) mm²
				connection of **6 lines** of the types H05VV-F2x0.75; H03VV-F2x0.75 Halogen low voltage line 2x1.5: cable sheath cross section (6x3.5) mm² to (7x5) mm²
Stripping lengths (fig. 4):	A	12 mm		12 mm
	B	7 mm		8 mm

		HTN 75/230-240 I	HT 120/230-240/12 LF	HTL 105/230-240	HTL 225/230-240
Nominal line voltage:		230 V – 240 V			
Operating voltage:		207 V – 254 V			
Safe operation:		207 V – 264 V		207 V – 264 VAC, 176 V – 275 VDC	
Range of battery voltage for emergency installation:				176 V – 275 V	
Nominal line current:		0.32 A_{eff}	0.48 A_{eff}	0.44 A_{eff}	0.90 A_{eff}
Line frequency:		50 – 60 Hz	50 Hz	0; 50 – 60 Hz	
Output voltage (230 V):		11.5 V (75 W), 11.7 V (20 W)	11.5 V (120 W), 11.5 V (35 W)	11.6 V (105 W), 11.3 V (35 W)	11.6 V (225 W), 11.7 V (50 W)
Losses:		max. 4 W (75 W)	max. 6 W (120 W)	max. 6 W (105 W)	max. 9 W (225 W)
Load range:		20 W – 75 W	35 W – 120 W	35 W – 105 W	50 W – 225 W
Standards:		EN 55015; EN 61000-3-2; EN 61547; EN 61047; IEC 61347			
Approvals:					
Temperature range:		0 °C to +50 °C	-20 °C to +45 °C	-20 °C to +50 °C	
Max. inrush current for cold lamps:		0.37 A_{eff} (75 W)	2 A_{eff} (120 W)	0.6 A_{eff} (105 W)	1.5 A_{eff} (225 W)
Dimming:		**trailing** edge phase control		trailing or leading edge phase control	
Short circuit protection:		automat. switch off, reversible			
Overload protection:		automat. switch off, reversible			
Overheating protection:		automat. switch off, reversible			
Suitable cable types for primary side:		NYM(3x1.5) mm² H05VV-F(2x0.75) mm² H03VV-F(2x0.75) mm² H03VVH2-F(2x0.75) mm²		H03VV-F2x0.50 mm²; H03VV-F2x0.75 mm²; H05VVH2-F2x0.75 mm²; H03VVH2-F2x0.75 mm²; NYM-O 2x1.5 mm²; NYM-J 3x1.5 mm²; H05VV-F2x2.5 mm²	
Suitable cable types for secondary side:				H03VV-F2x0.75 mm²; H05VVH2-F2x0.75 mm²; NYM-O 2x1.5 mm²; H05VV-F2x1.5 mm²; H05VV-F2x2.5 mm²; NYM-J 3x1.5 mm²; NYM-J 3x2.5 mm²	
Stripping lengths (fig. 4):	A	10 mm	15 mm	14 mm	
	B	6 mm	7 mm	8 mm	

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