

# **Product Specification**

# **HV-Device**



EPS-100054-00 Edition November 2016



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## 2. General Information

#### 2.1. Introduction

This product specification is valid for all at point 2.2 headed parts of the HV-Device and includes the product components, the delivery status, technical features as well as the quality tests.

In case of inappropriate, deviating processing and subsequent quality problems the right of recourse will be rejected.

#### 2.2. Applying relevant Information/Documentation

a)	Processing Specification	EVS-100054-00
b)	Product Specification Kostal DOC00076784	Mini lamina contacts MLK 1.2
C)	Processing Specification Kostal DOC00061540	Mini lamina contacts MLK 1.2
d)	"Deutsche Norm" DIN EN 60352-2	Solder free electrical connection Part 2: crimp connection



# 3. Technical Characteristics

#### 3.1. Operating Temperature

Built-in space : Engine category

Allowed temperature range for the plastic material.

Operating temperature: -40°C up to +150°C Can withstand exposure up to 180°C at intermittent. Periods and up to a total of max. 300 hours. See plastic material data sheet.

Functionality of the HV-Device see DVP.

#### 3.2. Tightness of Socket- and Plug housing

When using 1.2 Contacts with seal: **IP6K9K** The single wire seal must not be exposed unprotected to the steam jet.

#### 3.3. Retention Force of Contacts to the Socket housing

The contact tear forces from the Socket housing are  $F_{Primary} \geq 55N$  and  $F_{Secondary} \geq 55~N$ 

#### 3.4. Retention Force of the Jumper to the Plug housing

The retention force of each jumper is min. 50N

#### **3.5. Mounting and Demounting Forces**

Max. force for the first assembling of the Socket housing to the Plug housing to preposition max. 90N. After the first assembling, it is not possible to remove the parts from each other without damaging.

#### 3.6. Mounting and Demounting Forces

Close the HV-Device from pre- in end positionmax. 75NOpen the HV-Device from end- in prepositionmax. 75N

#### 3.7. Characteristic of Contact System

Max. permitted conductor cross section: 1mm<sup>2</sup> with seal



# 4. Delivery Condition / Product Components of the Socket housing

#### 4.1. Delivery Condition

The Socket housing from the HV-Device will be delivered with an open secondary interlock.



#### 4.2. Product Components

The Socket housing from the HV-Device consists of the contact holder, lip-seal, secondary-interlock and protective shroud.





# 5. Delivery Condition / Product Components of the Plug housing

#### 5.1. Delivery Condition

The Plug housing from the HV-Device will be deliverd with CPA in preposition.



#### 5.2. Product Components

The Plug housing from the HV-Device consists of the pin housing, 2 jumpers and the CPA.





# 6. Executed Tests

## Tests according to LV 214 2010-03 Working Committee Test Guideline! Tests according the MLK contact are mentioned in the Kostalproduct specification.

PG 0   Receiving inspection and testing     PG 1   Dimensions     PG 2   Material and surface analysis, contacts     PG 3   Material and surface analysis, housings     PG 4   Contact overlap     Cut off safety by the handling of a 4mm padlock     PG 6   Interaction between contact and housing     PG 7   Handling and functional reliability of the housings     Holding force of the contact housing to the protective shroud     PG 8   Insertion and retention forces of the contacts     PG 9   Skewed insertion angle     PG 13   Effect of the housing on derating     PG 20   Subjection of the housings to climatic load     Holding force of the jumper   PG 21     PG 22   Resistance to chemicals     PG 23   Water tightness     PG 29   Holding force of the blind seal				
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Holding force female housing to pin housing		Holding force female housing to pin housing		

Product specific deviations are shown in the DVP-overview.



# 7. Index change table

Edition	Index	Editing
00	First edition November 2016	Kiechle