# Kidde Heat Detector Links and Housing Kits



Effective: August 2013

K-87-012

#### **FEATURES**

- For Use in:
  - WHDR™ Commercial Cooking Fire Suppression Systems
  - IND™ Industrial Fire Suppression Systems
- For Use with XV™ Control System and KRS-50 Control Box
- Wide Selection of Link Types and Temperature Ratings
- Rapid Response Links Available for Increased Spacing on IND Systems
- Low Cost, Reliable Detection

#### **DESCRIPTION**

#### **Heat Detector Links**

There are two types of mechanical heat detector links available for use with Kidde WHDR and IND fire suppression systems:

- Thermo Bulb links, available in Standard Response (KGS) and Rapid Response (KGR) (Figure 1)
- Fusible metal alloy links, Model KML (Figure 2) and Model KFA (Figure 3)

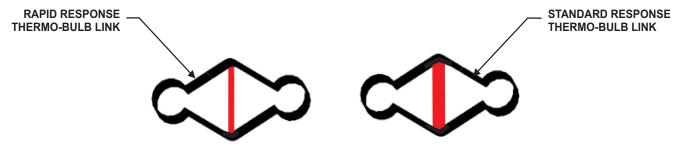


Figure 1. Thermo Bulb, P/N 87-12009X-XXX



Figure 2. KML Heat Detector Links, P/N WK-282661-XXX

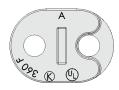


Figure 3. KFA Heat Detector Link, P/N 87-120060-001

Standard Response and Rapid Response Thermo Bulb Detector Links are available in six different temperature ratings (Table 1). KFA Detector Links are available in a 360°F (182°C) temperature rating only (Table 2). Thermo Bulb and KFA Detector Links can be used with the XV Control System or the KRS-50 Control Box.

KML Detector Links are available in four different temperature ratings (Table 2) and are listed for use with the XV Control System only.

Detector selection is based on the maximum expected exposure temperature determined via heat survey during normal operating conditions (refer to Table 1 and Table 2). Detector load ratings are shown in Table 3.

Table 1. Thermo Bulb Detector Link Ratings

Standard Response Part Number	Rapid Response Part Number	Detector Temperature Rating	Color	Maximum Exposure Temperature
87-120090-165	87-120095-165	165°F (74°C)	Red	100°F (38°C)
87-120090-212	87-120095-212	212°F (100°C)	Green	150°F (65°C)
87-120090-286	87-120095-286	286°F (141°C)	Blue	225°F (107°C)
87-120090-360	87-120095-360	360°F (182°C)	Mauve	300°F (149°C)
87-120090-450	87-120095-450	450°F (232°C)	Black	375°F (191°C)
87-120090-500	87-120095-500	500°F (260°C)	Black	435°F (224°C)

Table 2. KML and KFA Detector Link Ratings

Fusible Metal Detector Link Part Number	Detector Temperature Rating	Color	Maximum Exposure Temperature
Model KML			
WK-282661-000	165°F (74°C)	Yellow	100°F (38°C)
WK-282662-000	212°F (100°C)	White	150°F (65°C)
WK-282664-000	360°F (182°C)	Unpainted	300°F (149°C)
WK-282666-000	500°F (260°C)	Orange	440°F (226°C)
Model KFA			
87-120060-001	360°F (182°C)	Unpainted	300°F (149°C)

Table 3. Detector Link Load Ratings

Detector Type	Minimum Load	Maximum Load
Thermo Bulb	0 lb. (0 kg)	50 lb. (22.7 kg)
ML	10 lb. (4.5 kg)	40 lb. (18.1 kg)
А	3 lb. (1.4 kg)	45 lb. (20.4 kg)

#### **Detector Link Housing Kits**

Kidde Heat Detector Links are installed in the detection line using one of two Detector Link Housing Kits with the WHDR and IND Fire Suppression Systems:

- Low Profile Detector Link Housing Kit (P/N 804548) for use with the XV Control System only (Figure 4 and Table 4)
- Universal Detector Link Housing Kit (P/N 60-120064-001) for use with the XV Control System or KRS-50 Control Box (Figure 5 and Table 5)

Thermo Bulb links are held together with a liquid-filled glass tube which bursts at a pre-determined temperature, allowing the link halves to separate. KML and KFA fusible metal alloy links are composed of a specific alloy which melts at a predetermined temperature, allowing the link halves to separate. Separation of the detector link halves releases tension on the detection line, causing the XV Control System or KRS-50 Control Box to actuate the system cylinders.

Each of the two Detector Link Housings can accommodate any of the heat detector links listed with Kidde WHDR and IND systems and can be set up for either in-line or end-of-line use. Detector links are installed using two 'S' Hooks, connected to the detection line cable or housing, depending on configuration. Up to 40 Heat Detector Links can be installed on each detection line of an XV Control System or KRS-50 Control Box.

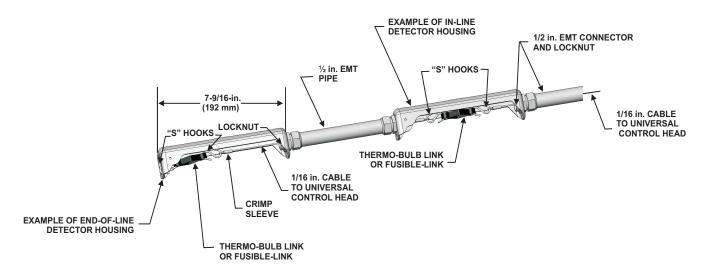


Figure 4. Low Profile Detector Link Housing (for use with XV Control System only)

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Table 4. Lov	/ Profile	Detector	l ink H	ousina	KIT.	P/N 8	304548

Description	Quantity
7-9/16 in. (192 mm) Link Housing	1
1/2-in. EMT Connector	2
Crimp Sleeve	4
`S' Hook	1

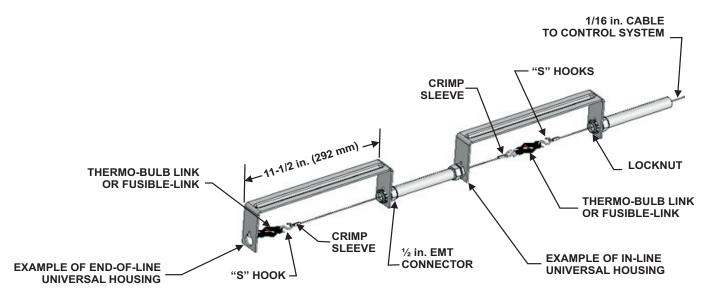


Figure 5. Universal Detector Link Housing (for use with XV or KRS-50 Control Box)

Table 5. Universal Detector Link Housing Kit, P/N 60-120064-001

Description	Quantity
11-1/2-in. (292 mm) Link Housing	1
Crimp Sleeve	2
"S" Hook	2

### REFERENCE INFORMATION

- WHDR systems designed and installed in accordance with manual P/N 87-122000-001
- IND systems designed and installed in accordance with manual P/N 220423
- Vehicle Spray Booth Systems designed and installed in accordance with manual P/N 83-100036-001

## **ORDERING INFORMATION**

Description	Part Number			
Detector Housings & Control Equipment				
Universal Detector Link Housing Kit	60-120064-001			
Low Profile Detector Link Housing Kit	WK-804548-000			
EMT Connector Kit (set of 3)	87-120058-001			
'S' Hooks (pack of 50)	60-9197288-000			
Crimp Sleeves (pack of 50)	60-9197287-000			
Control Cable (1/16-in. x 500 ft.)	WK-219649-000			
Thermo Bulb Links	Part Number (5-Pack)			
KGS-165, Standard Response 165°F (74°C), Red	87-120091-165			
KGS-212, Standard Response 212°F (100°C), Green	87-120091-212			
KGS-286, Standard Response 286°F (141°C), Blue	87-120091-286			
KGS-360, Standard Response 360°F (182°C), Mauve	87-120091-360			
KGS-450, Standard Response 450°F (232°C), Black	87-120091-450			
KGS-500, Standard Response 500°F (260°C), Black	87-120091-500			
KGR-165, Rapid Response 165°F (74°C), Red	87-120096-165			
KGR-212, Rapid Response 212°F (100°C), Green	87-120096-212			
KGR-286, Rapid Response 286°F (141°C), Blue	87-120096-286			
KGR-360, Rapid Response 360°F (182°C), Mauve	87-120096-360			
KGR-450, Rapid Response 450°F (232°C), Black	87-120096-450			
KGR-500, Rapid Response 500°F (260°C), Black	87-120096-500			
ML Type Fusible Alloy Links (XV Only)	Part Number (each)			
KML-165 Link, 165°F (74°C), Yellow	WK-282661-000			
KML-212 Link, 212°F (100°C), White	WK-282662-000			
KML-360 Link, 360°F (182°C), Unpainted	WK-282664-000			
KML-500 Link, 500°F (260°C), Orange	WK-282666-000			
A Type Fusible Alloy Links	Part Number (each)			
KFA-360 Link, 360°F (182°C)	87-120060-001			
Control Systems				
XV Control System	87-120099-002			
KRS-50 Control Box	87-120010-001			

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