

Flame Sensors

UV flame sensors C7061A/F



C7061A



Solid-state electronic UV flame sensor to detect ultraviolet radiation emitted by the combustion of most carbon-containing fuels such as natural gas, LP gases, and oil. Used with Honeywell burner controls to provide flame supervision in continuous operation for industrial burner applications.

Approvals

- CE approved according to EN298 only in combination with matching Honeywell flame amplifiers and burner controls.
- C7061-series models are approved for use in continuous operation, by using dynamic self-check.
- C7061F1 models are ATEX approved for use in explosion hazardous locations; II G Ex d IIC T6, zone 1&2.
- C7061F2 models are UL listed for use in explosion hazardous locations; Class 1, groups C and D; and Class 2, groups E, F, and G.

Ambient temperature

-40 ... 80 °C

Additional description

- Two flame detectors can be wired in parallel to reduce nuisance shutdowns in difficult flame sighting applications.
- Quick and easy installation on standard 3/4" NPT sight pipe (Ex-proof models: 1" NPT).
- Uses the same UV sensing ("Power") tube as used with C7027/35/44 series "MiniPeeper": no external power supply.
- The "DIN" models have an additional grounding wire (green/yellow)

European models for continuous operation, with mechanical shutter

Mechanical connection	Cable length m	Protection class	Comment	Note	Type
3/4" NPT	2,4	IP66	"DIN" model, with 5-wire cable	Single shutter coil voltage: 120V only	C7061A1004/U
3/4" NPT	0	IP66		Dual shutter coil voltage: 120/230V	C7061A1020/U
3/4" NPT	0	IP66	With focussing lens	Dual shutter coil voltage: 120/230V	C7061A1079/U

ATEX certified Ex-proof European models for continuous operation, with mechanical shutter (Ex: CENELEC II G Ex d IIC T6; zone 1&2)



C7061F

Mechanical connection	Cable length m	Protection class	Comment	Note	Type
1" NPT	0	IP67	Incl. cable gland	Dual shutter coil voltage: 120/230V	C7061F1003

American models for continuous operation, with mechanical shutter

Mechanical connection	Cable length m	Protection class	Comment	Note	Type
3/4" NPT	2,4	IP66		Single shutter coil voltage: 120V only	C7061A1012/U
3/4" NPT	2,4	IP66	With focussing lens	Single shutter coil voltage: 120V only	C7061A1061/U

Flame Sensors



C7061F2

UL listed Ex-proof American models for continuous operation, with mechanical shutter (Ex: Class I, gr.C/D and Class II, gr.E/F/G)

Mechanical connection	Cable length m	Protection class	Comment	Note	Type
1" NPT	2,4	NEMA 7	Ex-proof in Americas only	Single shutter coil voltage: 120V only	C7061F2001/U

Used with controllers

Industrial burner controller used with plug-in flame amplifier.	EC/RM78xx series
Industrial flame switch used with plug-in flame amplifier.	R4348B1008
Industrial flame switch with LED indicator and 4-20 mA analogue output for flame signal, used with plug-in flame amplifier.	R4348B1057

Self-check amplifier for the Honeywell R4348 series.

FFRT = 1 sec, max	R7061A1008
FFRT = 2 sec, max	R7061A1016

Self-check amplifier for the Honeywell EC/RM78xx series.

FFRT = 2.0 or 3.0 sec. Note: When used with C7061 models with 120V shutter voltage only and with EC78xx controls (230Vac), take precautions to reduce line voltage shutter voltage to prevent damage to the connected C7061 !!	R7861A1026/U
FFRT = 1.0 or 0.8 sec. Note: When used with C7061 models with 120V shutter voltage only and with EC78xx controls (230Vac), take precautions to reduce line voltage shutter voltage to prevent damage to the connected C7061 !!	R7861A1034/U

Accessories

Swivel mount for adjustable positioning of the UV sensor	118367A/U
Mounting flange for C7061A with 1" NPT internal thread for mounting on 1" sight pipe (to replace standard 3/4" NPT flange)	124198/U
Quartz focussing lens	124204/U

Replacement parts

Ultraviolet sensing tube for C7061 sensors, -40..102C	129464N/U
Coil and shutter assembly	190971B/U