

**Types**

**FK-K90 · FKN-K90**  
**FKW-K90 cancelled**

**Leaflet**

**Old** – 4/2/D/5  
**New** – 4/2/D/6

**Construction Variants**

| Code for Construction Variants | Type FK-K90 Z-41.3-321 | Type FKN-K90 Z-41.3-318 |
|--------------------------------|------------------------|-------------------------|
| -K90-1                         | ●                      | ●                       |
| -K90-2                         | ●                      | ●                       |
| -K90-3                         |                        | ●                       |
| -K90-5                         |                        | ●                       |
| -K90-6                         | ●                      |                         |
| -K90-W *)                      | ●                      | ●                       |
| -K90-1-3                       |                        | ●                       |
| -K90-1-6                       | ●                      |                         |
| -K90-1-W *)                    | ●                      | ●                       |
| -K90-2-3                       |                        | ●                       |
| -K90-2-6                       | ●                      |                         |
| -K90-2-W *)                    | ●                      | ●                       |
| -K90-3-W *)                    |                        | ●                       |
| -K90-6-W *)                    | ●                      |                         |
| -K90-1-3-W *)                  |                        | ●                       |
| -K90-1-6-W *)                  | ●                      |                         |
| -K90-2-3-W *)                  |                        | ●                       |
| -K90-2-6-W *)                  | ●                      |                         |

\*) new for type FKW-K90

**Code**

- K90-1 = With powder coating RAL 7001
- K90-2 = Stainless steel construction
- K90-3 = With aluminium clad damper blade
- K90-5 = Shock tested construction with powder coating RAL 7001, certified for installation in solid walls and ceiling slabs and in conjunction with spring return actuators Z43 and Z45 (type BF)  
 Shockproof data:  
 Application certificate No. 052/98  
 Regulation test class RK 2,5/25, safety grade "A" for the dimensions width / height from 200/200 to 800/800;  
 Regulation test class RK 1,6/16, safety grade "A" for the dimensions width / height from 900/800 to 1500/800
- K90-6 = With sheet metal covered damper blade (cover made of galvanised sheet steel)
- ...-W \*) = With fusible link 95 °C, e.g. FK-K90-1-W
- K90-1-3 = With powder coating RAL 7001 and aluminium clad damper blade
- K90-1-6 = With powder coating RAL 7001 and sheet metal covered damper blade (cover made of stainless sheet steel)
- K90-2-3 = Stainless steel construction with aluminium clad damper blade
- K90-2-6 = Stainless steel construction with sheet metal covered damper blade (cover made of stainless sheet steel)

**External controls**

**Old** Right hand side / Left hand side  
**New** Left hand side cancelled

**Advantage!**  
 It is not any more necessary to state a "preference external control side" during planning

**Installation**

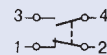
- New**
- Installation with installation subframe in solid walls and ceiling slabs
- Advantage!**  
 Easy and good calculable mounting-costs and if necessary disassembly
- Installation in lightweight partition walls directly below a ceiling slap
- Advantage!**  
 Space-saving compared with present solutions
- Installation in lightweight partition walls with installation kit (cover strips not any more necessary)
- Advantage!**
- More universally useable than previously
  - Installation effort lower than previously

**Accessories with limit switch**

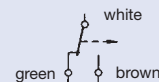
- Modification** – Z01 - Z03  
 Z08  
 Z10 - Z12  
 Z16 - Z21
- Additionally** – Z22 - Z24
- Previous limit switches will be substituted by micro limit switches with connecting conductor.
- Advantage!**
- Gold plated contacts for switching low ratings too
  - Higher degree of protection
  - Less effort during electrical installation

**Technical Data:**

**Old** – Double changeover contact (insert screw fixed)  
 Circuit breaking capacity: 230 V AC, 6 A  
 Contact resistance: max. 25 mΩ  
 Degree of protection IP 66



**New** – Micro limit switch with 0.5 m connecting conductor  
 Degree of protection IP 67  
 Single pole changeover contact  
 Contacts: galv. gold-plated  
 Max. switching current inductive, ohmic: 0.5 A  
 Max. switching voltage: 30 V DC, 250 V AC  
 Min. switching power: 3 V / 5 mA  
 Contact resistance: < 30 mΩ



### Accessories with magnet (power on to close)

- Modification** – Z10 - Z12  
Z16 - Z18
- Previous solenoids will be substituted by impulse magnets with connecting conductor.
- Advantage!**
- Less power consumption
  - Higher degree of protection
  - Less effort during electrical installation
- Cancelled** – Z13 - Z15

### Technical Data:

- Old**
- Z10 - Z12:  
U = 230 V, 50 Hz / P ≈ 700 VA / IP 30 / 25 % ED
  - Z16 - Z18:  
U = 24 V- / P ≈ 65 W / IP 54 / 25 % ED
  - Z13 - Z15:  
U = 230 V, 50 Hz / P ≈ 65 W / IP 54 / 25 % ED
- New**
- Z10 - Z12:  
U = AC 230 V / P = 3.5 W / IP 42 / 100 % ED
  - Z16 - Z18:  
U = DC 24 V / P = 3.5 W / IP 42 / 100 % ED
  - Z13 - Z15:  
not any more deliverable

### Accessories with magnet (power off to close)

- Modification** – Z19 - Z21
- Additionally** – Z22 - Z24
- Previous electro magnets will be substituted by electro magnets with connecting conductor.
- Advantage!**  
Less effort during electrical installation
- Cancelled** – Z25 - Z27

### Technical Data:

- Old**
- Z19 - Z21:  
U = 24 V- / P ≈ 6 W / IP 30 / 100 % ED
  - Z22 - Z24:  
Previously not available
  - Z25 - Z27:  
U = 24 V- / P ≈ 6 W / IP 65 / 100 % ED
- New**
- Z19 - Z21:  
U = DC 24 V / P = 1.6 W / IP 42 / 100 % ED
  - Z22 - Z24:  
U = AC 230 V / P = 1.6 W / IP 42 / 100 % ED
  - Z25 - Z27:  
not any more deliverable

## Accessories with spring return actuator

- New**
- Z43, Z45, Z60 and Z61
- The BF actuators will be substituted by BLF actuators (only valid for dampers with maximum width 800 mm and maximum height 400 mm).
- Advantage!**
- Lower price compared with BF actuators
  - Prices according to price list 2002
- Modification**
- Z60 and Z61
- The power supply unit BKN230-24-1B TR will be substituted by the power supply unit BKN230-24-1 TR.

## Technical Data:

- New**
- Z43:  
Type BLF230-T TR  
U = AC 230 V, 50/60 Hz /  
opening P ≈ 5 W /  
in the open position P ≈ 3 W /  
capacity 7 VA / safety class II /  
IP 54 / 100 % ED  
opening approx. 40 ... 75 s /  
closing approx. 20 s  
auxiliary switches:  
2 x EPU 6 (1.5) A, AC 250 V
  - Z45, Z60 and Z61:  
Type BLF24-T-ST TR  
U = AC 24 V, 50/60 Hz resp. DC 24 V /  
opening P ≈ 5 W /  
in the open position P ≈ 2.5 W /  
capacity 7 VA / safety class III /  
IP 54 / 100 % ED  
opening approx. 40 ... 75 s /  
closing approx. 20 s  
auxiliary switches:  
2 x EPU 6 (1.5) A, AC 250 V

## Cancelled

- Z46 - Substitute: Z43
- Z47 - Substitute: Z45
- Z62 - Substitute: Z60
- Z63 - Substitute: Z61
- Z59 - Substitute: None (Belimo do not produce this actuators any longer)