

KOSTAC SJ Sound type

PLC gives attention.
It can speak according to ladder control.

SJ has easy useful Audio message (built-in sound board) and USB interface.
This provides packaged coordination between sound and control.



KOSTAC Safety
PLC reached world safety standard.

EN954-1

IEC61508
SIL3

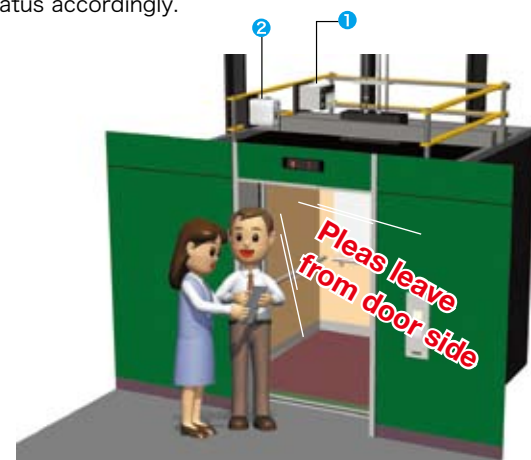
ISO13849-1:2006
PLe

KOSTAC Safety AZ-C1 is suited to international safety standard, and is designed to achieve "minimum risk".
Such as safety relay or safety controller features are here, and target devices can be controlled and monitored accurately and simply.
AZ-C1 provides flexible, low cost, easy and practical new generation control.



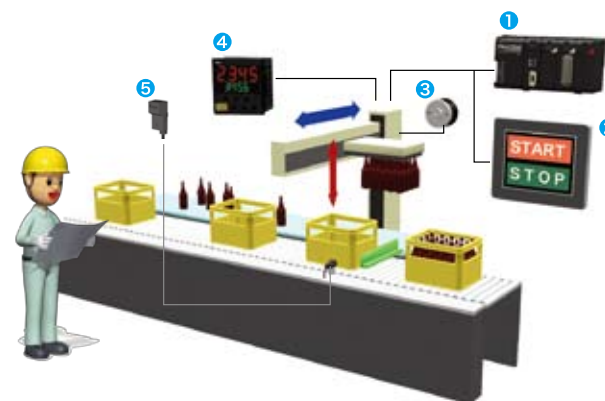
Example application 1
At an elevator

- 1 Safety PLC can stop elevator running while opening the door to prevent serious accident.
- 2 Also with the sound SJ, elevator can guide it's status accordingly.



Example application 2
At a beverage factory

- 1 PLC controls a packaging machine and a conveyor.
- 2 Status of facility is indicated by operator panel.
- 3 Encoder drives a conveyor.
- 4 Number of products is counted by counter.
- 5 Proximity sensors detect case of bottles.



Value & Technology

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Koyo
KOYO ELECTRONICS

PRODUCTS LINEUP
2011

Programmable Logic Controllers
Human Machine Interfaces
Proximity Sensors
Rotary Encoders
Electronic Counters / Controllers





KOSTAC SJ Series
Micro size block type PLC

- Small but powerful. Micro size high-performance PLC.
- 3 type CPUs (Standard, Analog and sound type)
- Maximum 8 expansion modules available
- CPU with built-in I/Os (14 points maximum)
- Maximum 142 points I/Os
- 7.5K Words Program memory and 7.5 K Words Data memory
- 3 communication ports available (2 ports at Standard type)
- Includes 16 loop PID control



AZ-C1 Series
Small size safety PLC

- Safety PLC based on universal standard
- EN954-1 category 4
- IEC61508 SIL3
- ISO13849-1:2006 PLc
- CPU with built-in I/Os (8 in / 6 out)
- Maximum 16 expansion modules available
- Maximum 256 points I/Os
- 16K words program memory
- Two types of operation mode (programless/free program)
- Combination program (safety control and general control) is available



TRD-MX series
Incremental type ϕ 38

- Body diameter: 25mm
- Shaft diameter: 4mm
- Depth: 29mm
- Pulse per revolution: 100-1024P/R
- Supply voltage: DC5-12V \pm 10%
- DC12-24V \pm 10%
- DC5V \pm 5%
- Signal waveform: Two phase + home position
- Output type: NPN open collector output / line-driver
- Protection degree: IEC-IP50 dust proof



TRD-S/SH series
Incremental type ϕ 38

- Body diameter: 38mm
- Shaft diameter: 6mm (internal diameter of hollow shaft 8mm)
- Depth: 30mm
- Pulse per revolution: 10-2500P/R
- Supply voltage: DC5-12V \pm 10%
- DC12-24V \pm 10%
- DC5V \pm 5%
- Signal waveform: Two phase + home position
- Output type: NPN open collector output / line-driver
- Protection degree: IEC-IP40 dust proof



TRD-2E series
Incremental type ϕ 40

- Body diameter: 40mm
- Shaft diameter: 6mm
- Depth: 36mm
- Pulse per revolution: 10-3600P/R
- Supply voltage: DC5-12V \pm 10%
- DC12-24V \pm 10%
- DC5V \pm 5%
- Signal waveform: Two phase + home position
- Output type: NPN open collector output / line-driver
- Protection degree: IEC-IP40 splash proof



TRD-N/NH series
Incremental type ϕ 50

- Body diameter: 50mm
- Shaft diameter: 8mm (internal diameter of hollow shaft 8mm)
- Depth: 35mm
- Pulse per revolution: 1-5000P/R
- Supply voltage: DC4.75-30V
- DC5V \pm 5% (line-driver)
- Signal waveform: One phase, Two phase + home position
- Output type: Totem-pole output / line-driver
- Protection degree: IEC-IP50/IP65 dust / jet proof



KCV series
Electronic counter

- Single Preset Counters for Addition and Subtraction / Total Counter for Addition and Subtraction
- External dimensions: 48mm x 48mm
- Display: LED 4 digits / 6digits
- Power supply: DC / AC
- Maximum input speed: 10kHz



KCX series
Electronic counter

- Single / Double Preset Counters for Addition and Subtraction / Total Counter for Addition and Subtraction
- External dimensions: 72mm x 72mm
- Display: LED 1-8digits
- Power supply: AC
- Maximum input speed: 5kHz / 20kHz



KCM series
Multi counter

- Triple Preset Counters for Addition and Subtraction
- 9 counters / 8 counters included
- External dimensions: 72mm x 72mm
- Display: LED 5digits
- Power supply: DC
- Maximum input speed: 500Hz



DirectLOGIC 05 Series
Micro size brick PLC

- Micro PLC with incredible features and super low prices
- CPU with built-in I/Os (8 in / 6 out)
- 1 expansion module slot
- Maximum 30 points I/Os
- 2K words program memory and 4K words data memory
- 2 communication ports available
- Includes 4 Loop PID control



DirectLOGIC 06 Series
Micro size expandable brick PLC

- DL06... combining fixed I/O with four option card slots for expansion modules
- CPU with built-in I/Os (20 in/16 out)
- 4 expansion module slots
- Maximum 100 points I/Os
- 7.5K words program memory and 7.3K words data memory
- 2 communication ports available
- Includes 8 Loop PID control



DirectLogic205 series
Compact module type PLC

- High cost performance model
- 4 type CPUs available
- Maximum 8 expansion module slots
- Maximum 8192 point I/Os
- Program memory 2K words through 15.8K words
- Data memory 2.4 through 30.4K
- 2 communication ports available (except D2-230)
- Includes 8 Loop PID control



PZ series
Thin micro PWB type PLC

- Available for OEM purpose as embedded product
- AC power supply type also available
- Maximum 200 built-in I/Os
- Program memory 2K through 7.5K
- Data memory 256 through 8.3K
- PZ3 has 2 communication ports (PZ1, 2 have 1 communication port)



TRD-J series
Incremental type ϕ 50

- Body diameter: 50mm
- Shaft diameter: 8mm
- Depth: 50mm
- Pulse per revolution: 10-1000P/R
- Supply voltage: DC4.75-30V
- DC5V \pm 5% (line-driver)
- Signal waveform: One phase, Two phase + home position
- Output type: Totem-pole output / line-driver
- Protection degree: IEC-IP50/IP65 dust / jet proof



TRD-GK series
Incremental type ϕ 78

- Body diameter: 78mm
- Shaft diameter: 10mm
- Depth: 60mm
- Pulse per revolution: 10-5000P/R
- Supply voltage: DC10-30V
- Signal waveform: Two phase, Two phase + home position, direction signal
- Output type: Totem-pole output
- Protection degree: IEC-IP65 dust / jet proof



TRD-NA series
Absolute type ϕ 50

- Body diameter: 50mm
- Shaft diameter: 8mm
- Depth: 35mm
- Pulse per revolution: 32-2048P/R (5bit-11bit)
- Supply voltage: DC10.8-26.4V
- Encoder output: Gray code binary (11bit maximum)
- Output type: NPN/PNP open collector output
- Protection degree: IEC-IP65 dust / jet proof



TRD-K/KL series
Absolute type ϕ 78

- Body diameter: 78mm
- Shaft diameter: 10mm
- Depth: 68mm
- Pulse per revolution: 180-1024P/R (8bit-10bit)
- Supply voltage: DC10-30V
- Encoder output: Gray code binary (10bit maximum)
- Output type: NPN open collector output
- Protection degree: IEC-IP65 dust / jet proof



KT-V series
Digital timer

- Single Preset Timer
- External dimensions: 48mm x 48mm
- Display: LED 4digits
- Power supply: AC / DC
- Time range: 0.001s-999.9h



TC-V series
Digital tachometers

- Single Preset Tachometer
- External dimensions: 48mm x 48mm
- Display: LED 6digits
- Power supply: DC
- Maximum input speed: 20kHz



TC series
Digital tachometers

- Single / Double Preset Tachometer
- External dimensions: 48mm x 48mm, 48mm x 96mm
- Display: LED 4digits
- Power supply: AC
- Maximum input speed: 2kHz / 10kHz



SA/SR series
Medium range module type PLC

- Classic long seller model
- Two variation of sequence language are available (SR RLL and SA Stage)
- Maximum 8 expansion module slots
- Maximum 168 point I/Os
- 512 through 3.7K program memory / 192 data memory



SU series
Medium range module type PLC

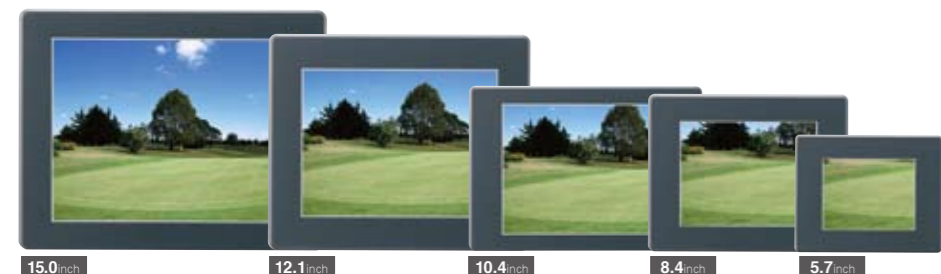
- Ultimate model with extreme valuable features
- 4 type CPUs available
- Maximum 8 expansion module slots
- Maximum 2048 point I/Os
- Program memory 3.5K through 31.5K
- Data memory 3.6K through 14.8K
- 4 communication ports available (SU-5M, 6M)
- (2 communication ports available at SU-5E, 6B)
- Includes 16 Loop PID control



Terminator I/O
Dispersive remote I/O terminal

- Powerful individual remote I/Os usable with SCADA or PC for dispersion control system
- 7 types of network interface are available
- Expandable with maximum 16 modules
- Offers various module combination

PLCs
HMIs



ViewJetCmore series
Progressive HMI with advanced features

- 5.7 through 15.0 inch TFT LCD model variations (5.7 inch STN color / monochrome LCD models also available)
- PC connectable through Ethernet/USB
- PLC communication through Ethernet/Serial
- Expandable memory storage with Compact Flash Slot
- IP65
- available sound features as regular feature (Except EA7-S6M-RS and EA7-S6M-RS)



NX-G11
High reliability Panel Computer

- Display 12.1inch XGA TFT
- CPU / Intel® Atom™ N270 1.6GHz
- OS / Windows® Embedded Standard 2009

ROTARY ENCODERS
PROXIMITY SENSORS



APS-GMC series
Less wiring, 2-wire round metal DC type inductive proximity sensor

- Type: M8-M18 embedded type
- Sensing distance: 2-7mm
- Outputs: 2-wire DC, Normally open
- Supply voltage: 10-30VDC
- Protection degree: IEC-IP67



APS-GMD series
2-wire/3-wire round metal DC type inductive proximity sensor

- Features 360 degrees viewable indicator.
- Type: M12-M30 non-embedded/ embedded type
- Sensing distance: 3-24mm
- Outputs: 2-wire DC, Normally open
- 3-wire DC, NPN normally open
- 3-wire DC, PNP normally open
- Supply voltage: 10-30VDC
- Protection degree: IEC-IP67



APS-GK series
2-wire/3-wire round plastic DC type inductive proximity sensor

- Allows various output types.
- Type: M12-M30 non-embedded type
- Sensing distance: 5-18mm
- Outputs: 2-wire DC, Normally open
- 3-wire DC, NPN normally open
- 3-wire DC, PNP normally open
- Supply voltage: 10-36VDC
- Protection degree: IEC-IP67



APS-CK series
2-wire round plastic DC type inductive proximity sensor

- Long distance sensing with operation indicator.
- Type: M30 non-embedded type
- Sensing distance: 2.5-4mm
- Outputs: 2-wire DC, Normally open
- 3-wire DC, NPN normally open
- 3-wire DC, PNP normally open
- Supply voltage: 10-30VDC
- Protection degree: IEC-IP67



APS-S/M series
2-wire/3-wire rectangular plastic DC type inductive proximity sensor

- Compact and practical price.
- Type: Non-embedded type
- Sensing distance: 2.5-4mm
- Outputs: 2-wire DC, Normally open
- 3-wire DC, NPN normally open
- 3-wire DC, PNP normally open
- Supply voltage: 10-30VDC
- Protection degree: IEC-IP67



APS-F/U series
2-wire/3-wire rectangular plastic DC type inductive proximity sensor

- A variety of lineup fits various purposes.
- Type: Non-embedded type
- Sensing distance: 3-10mm
- Outputs: 2-wire DC, Normally open
- 3-wire DC, NPN normally open
- 3-wire DC, PNP normally open
- Protection degree: IEC-IP67



APS-10-15 series
3-wire rectangular plastic DC voltage output type inductive proximity sensor

- A broad range of sensing distances. DC voltage output type.
- Type: Non-embedded type
- Sensing distance: 4-15mm
- Outputs: 3-wire DC voltage output type
- 3-wire DC, NPN normally open
- 3-wire DC, PNP normally open
- Protection degree: IEC-IP66/IP67



CS series
3-wire DC capacitive proximity sensor

- Capable of detecting not only metals but also any type of materials, including wood, paper, plastic and water.
- type: Round shape M2-M30
- Rectangular shape non-embedded
- Sensing distance: 5-15mm
- Output: 3-wire DC, NPN normally open
- 3-wire DC, voltage output type
- Protection degree: IEC-IP50/IP65/IP66