



BACKUP ASSISTANCE SYSTEM (BAS) ENCLOSURE CONFIGURATIONS

SICK
Sensor Intelligence.

BAS (BACKUP ASSISTANCE SYSTEM)

SYSTEM OVERVIEW

- The BAS (Backup Assistance System) driver assistance system actively monitors the area obstructed from view behind a manned forklift truck to minimize collisions
- The BAS provides real-time feedback to the driver only when any stationary or moving objects appear in the obstructed-view area behind forklift
- Using the feedback, the driver takes the preventative action to avoid collision with the object
- The system can be tied to the reverse gear of the vehicle to eliminate false alarms
- The system gives real-time feedback to the driver via an audible/visual warning(s)
- The system is available to two electronics versions with a variety of voltages to meet the range of fork lift trucks
- The BAS systems offers two TiM sensor options for indoor (TiM320) and outdoor (TiM351) operation



BAS (BACKUP ASSISTANCE SYSTEM)

SYSTEM OVERVIEW

- The BAS System configuration is based on three selections:

- TiM Sensor Type

- ▶ TiM320 – Indoor, 2 m range, blue
- ▶ TiM351 – Outdoor, 8 m range, gray



- Electronics Version

- ▶ Enclosure with cables for power and reverse signal
 - Light stack/buzzer (clamp & 2.38 in. socket arm included)
 - Sensor mounting bracket (order mounts as accessories)
- ▶ DIN rail (separate power and reverse signal cables)
 - Buzzer included, light stack optional
 - Sensor mounting bracket



- Input Voltage / Reversing Signal Relay

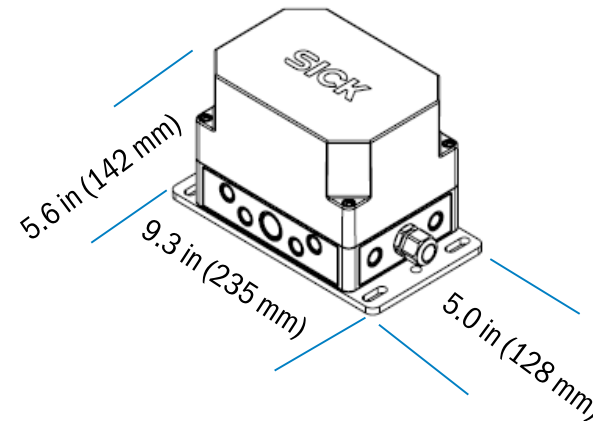
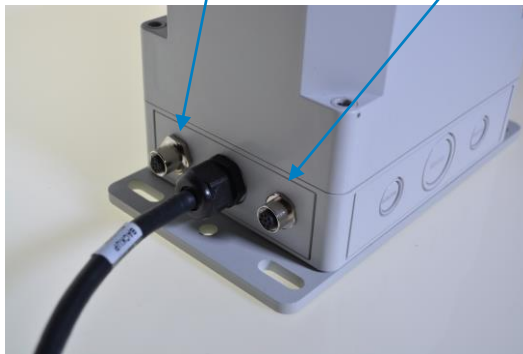
- ▶ Available in 12V, 24V, 48V, 60V, or 72V

BAS (BACKUP ASSISTANCE SYSTEM) SYSTEM OVERVIEW – ENCLOSURE VERSION

- The BAS System Enclosure version simplifies mounting and electrical connections
 - ▶ Pre-assembled cables for power and reverse signal



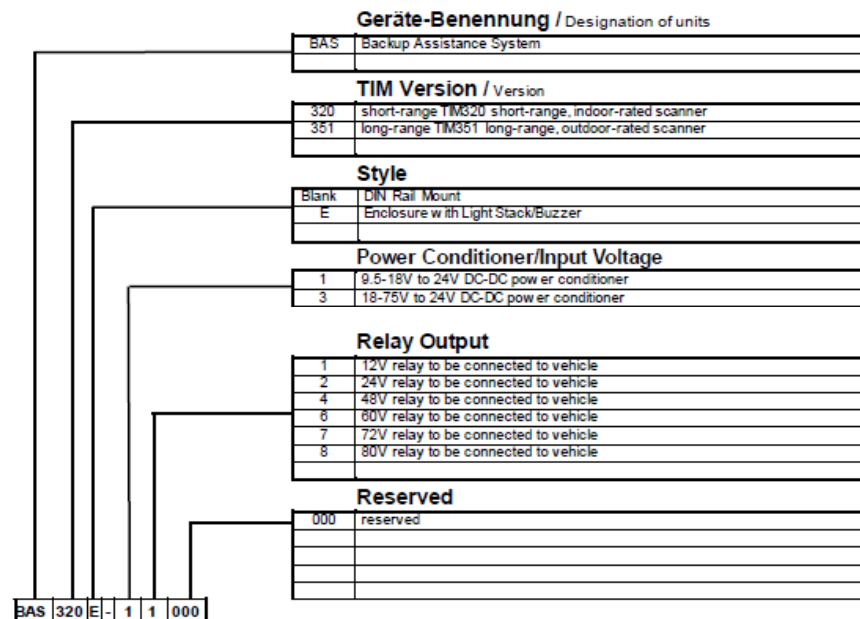
- ▶ Connections for Light Stack and Sensor cables



BAS (BACKUP ASSISTANCE SYSTEM)

SYSTEM OVERVIEW – ENCLOSURE VERSION P/Ns & SELECTION GUIDE

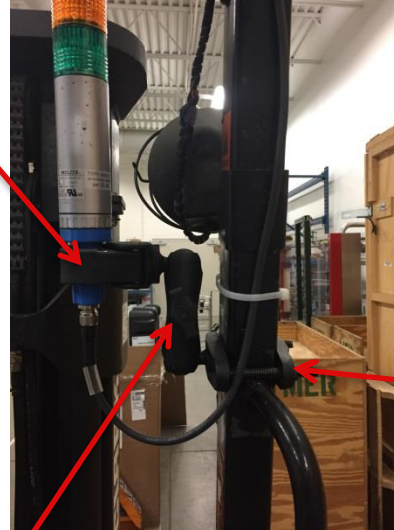
| SICK PN | SHORT TEXT MODEL DESCRIPTION | SENSOR TYPE | FIELD OF APPLICATION | SUPPLY VOLTAGE | REVERSING SIGNAL |
|---------|------------------------------|-------------|-------------------------|----------------|--------------------------------------|
| 1082440 | BAS320E-11000 | TIM320 | Indoor (2 m) | 12 VDC | 12V relay to be connected to vehicle |
| 1082441 | BAS320E-31000 | TIM320 | Indoor (2 m) | 18-75 VDC | 12V relay to be connected to vehicle |
| 1082442 | BAS320E-32000 | TIM320 | Indoor (2 m) | 24 VDC | 24V relay to be connected to vehicle |
| 1082443 | BAS320E-34000 | TIM320 | Indoor (2 m) | 48 VDC | 48V relay to be connected to vehicle |
| 1082444 | BAS320E-36000 | TIM320 | Indoor (2 m) | 60 VDC | 60V relay to be connected to vehicle |
| 1082445 | BAS320E-37000 | TIM320 | Indoor (2 m) | 72 VDC | 72V relay to be connected to vehicle |
| 1082447 | BAS351E-11000 | TIM351 | Indoor or Outdoor (8 m) | 12 VDC | 12V relay to be connected to vehicle |
| 1082448 | BAS351E-31000 | TIM351 | Indoor or Outdoor (8 m) | 18-75 VDC | 12V relay to be connected to vehicle |
| 1082449 | BAS351E-32000 | TIM351 | Indoor or Outdoor (8 m) | 24 VDC | 24V relay to be connected to vehicle |
| 1082450 | BAS351E-34000 | TIM351 | Indoor or Outdoor (8 m) | 48 VDC | 48V relay to be connected to vehicle |
| 1082451 | BAS351E-36000 | TIM351 | Indoor or Outdoor (8 m) | 60 VDC | 60V relay to be connected to vehicle |
| 1082452 | BAS351E-37000 | TIM351 | Indoor or Outdoor (8 m) | 72 VDC | 72V relay to be connected to vehicle |



BAS (BACKUP ASSISTANCE SYSTEM)

ACCESSORIES: NEED TM SENSOR MOUNTS, LIGHT STACK MOUNTS INCLUDED

| Product Description | SICK Part Number | Part Number | Image |
|-------------------------------------|------------------|---------------|---|
| Light stack and Buzzer Mount | | | |
| Light stack mount claw (1" Ball) | 5333532 | RAP-B-400-U |  |
| TiM Sensor Mount | | | |
| Sensor Piranha mount (1" Ball) | 5333547 | RAM-B-107-1BU |  |
| Sensor mount (1" Ball) | 5333533 | RAM-B-238U |  |
| Socket Arms | | | |
| 2.38" Socket arm (1" Ball) | 5333534 | RAM-B-201U-A |  |
| 3.69" Socket arm (1" Ball) | 5333535 | RAM-B-201U |  |
| 6" Socket arm (1" Ball) | 5333536 | RAM-B-201U-C |  |
| Short 1" Ball Adapter | 5333537 | RAM-B-230 |  |



| Product Description | SICK Part Number | Part Number | Image |
|------------------------------------|------------------|---------------|---|
| Post Clamps | | | |
| 4" Post Clamp, 3" bolt (1" Ball) | 5333539 | RAM-B-247U-4 |  |
| 3" Post Clamp, 3" bolt (1" Ball) | 5333540 | RAM-B-247U-3 |  |
| 2.5" Post Clamp, 3" bolt (1" Ball) | 5333541 | RAM-B-247U-25 |  |
| 2" Post Clamp, 3" bolt (1" Ball) | 5333542 | RAM-B-247U-2 |  |
| 1/2" to 2" Circular post clamp | 5333545 | RAM-B-108BU |  |
| Overhead Guard Mount | | | |
| Overhead Guard Plate | | RAM-335 |  |
| 1" Ball for Overhead Guard Plate | 5333544 | RAM-B-202U |  |
| Security Lock | | | |
| Security Knob Lock | 5333546 | RAP-S-KNOB3U |  |