# BTS80 EMB/I x butt hinges

Package I

Pull side mortised track - 160° opening

## **Installation instructions**

08064283 - 03-2021





## **Table of contents**

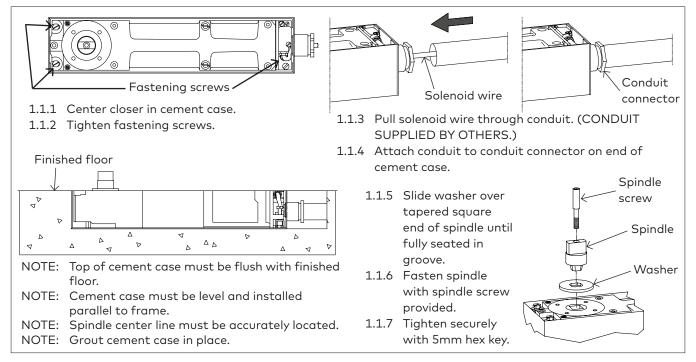
1	Installation	3
1.1	Attach spindle and install closer	3
1.2	Install slide block to arm	3
1.3	Install slide arm (7451) into track	3
1.4	Install arm to closer	4
2	Templates	4
2.1	Closer template	4
3	Adjustments	5
3.1	Adjust bottom door clearances (if necessary)	5
3.2	Adjust closing speeds	5
3.3	Sealing compound (optional)	5
4	Covers	6
4.1	Install cover	6
5	Operations	6
5.1	Operating the BTS0 EMB	6
5.2	Electrical specifications	6

2 BTS80 EMB Closers 08064283 03-2021

## 1 Installation

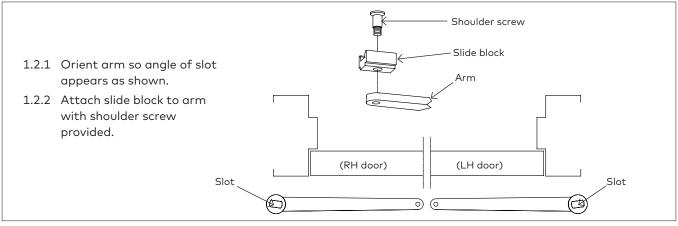
## 1.1 Attach spindle and install closer

#### Fig.1



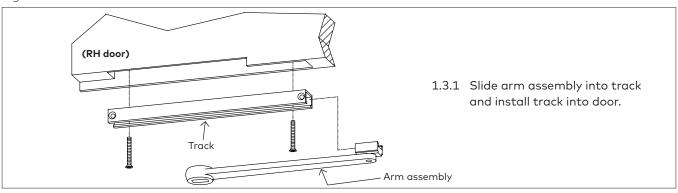
### 1.2 Install slide block to arm

Fig.2



## 1.3 Install slide arm (7451) into track

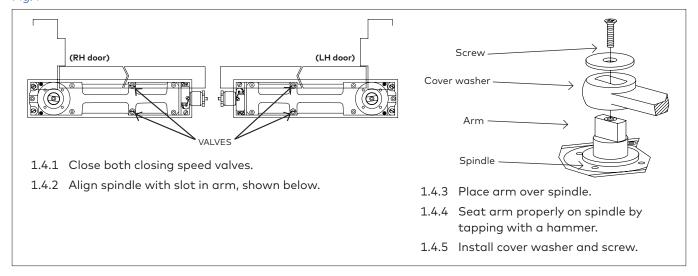
Fig.3



BTS80 EMB Closers 08064283 03-2021 3

### 1.4 Install arm to closer

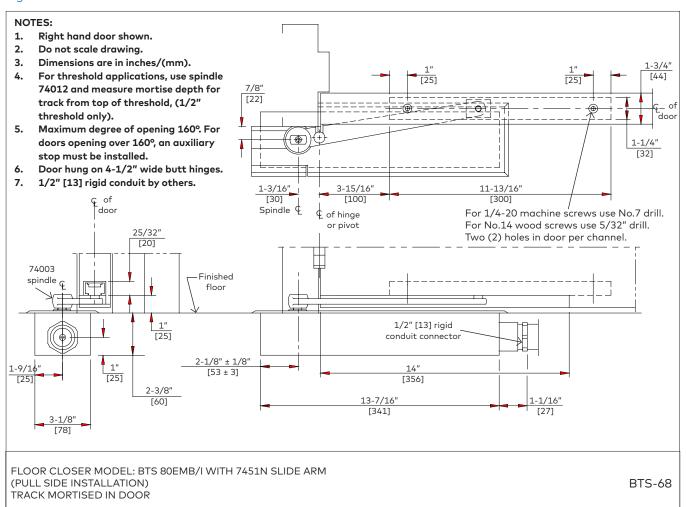
#### Fig.4



## 2 Templates

### 2.1 Closer template

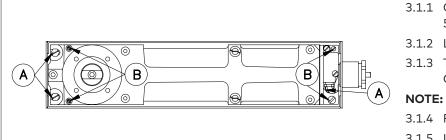
#### Fig.5



## 3 Adjustments

## 3.1 Adjust bottom door clearances (if necessary)

Fig.6



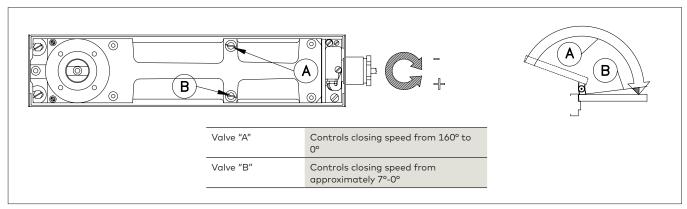
- 3.1.1 Closer can be raised approximately 5/32" with the cement case.
- 3.1.2 Loosen fastening screws "A".
- 3.1.3 Turn height adjustment screws "B" CW until desired height is obtained.

#### NOTE: Closer must remain level!

- 3.1.4 Re-tighten fastening screws "A".
- 3.1.5 If more clearance is necessary, change spindle to approriate size.

## 3.2 Adjust closing speeds

Fig.7



### 3.3 Sealing compound (optional)

Fig.8

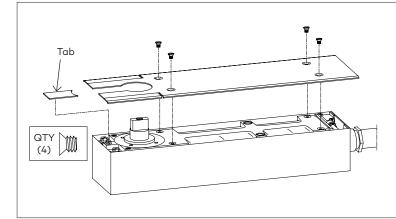
Sealing compound is recommended for exterior doors or areas with excessive moisture. Make all final adjustments before adding compound. Refer to instructions packed with compound for full details.

BTS80 EMB Closers 08064283 03-2021 5

## 4 Covers

#### 4.1 Install cover

Fig.9



- 4.1.1 Install cover plate or threshold.
- 4.1.2 Trim cover plate as required to match profile of pivot jamb.
- 4.1.3 Install cover plate with four screws provided.
- 4.1.4 Press tab in place behind spindle.
- 4.1.5 If threshold is installed, do not anchor threshold to closer body, since closer is adjustable within cement case.

## 5 Operations

### 5.1 Operating the BTS30 EMB

Fig.10

- 5.1.1 When BTS80 EMB is energized, door will hold open at any point between approximately 65° and max opening.
- 5.1.2 Allow for approximately 4° of fall away when considering hold open position.
- 5.1.3 To release door from hold open, manually pull door closed a few inches.
- 5.1.4 When de-energized, the BTS80 EMB operates as a standard floor closer.

## 5.2 Electrical specifications

Fig.11

**Operating voltage:** 24 Volts DC (10%) max. allowable residual

ripple 30%

**Input current:** 125 MA

- 5.2.1 Important: If the BTS80 EMB is connected to a fire alarm system, the unit must be tested after installation, by the end user, to be certain that the door closer unit functions properly when the alarm system is activated.
- 5.2.2 The entire system must also be tested periodically after the initial installation test, in conjunction with the testing of the fire alarm
- 5.2.3 The end user is also responsible for maintaining the door closing system.

6 BTS80 EMB Closers 08064283 03-2021