Subject: “Contact Shields” on horizontally mounted Klockner-Moeller and Benedikt+Jager

Sent to: Elevator Contractors in ScopUe L, L1, F1 & Consultants

1. INTRODUCTION

1.1 In the past, a series of accidents or incidents occurred, when elevators moved with doors open, because a fallen screw, washer or a strand of wire had overbridged adjacently located front and back contacts on horizontally mounted relays. Contractors were informed about the hazard and ordered to take specific actions with Director’s Ruling #82/90, covering Klockner-Moeller relays and Safety Alert #136/98, relating to Benedikt+Jager relays.

1.2 In order to eliminate this hazard, contractors used various methods. One method was the installation of contact shields as a barrier between the front and back relays contacts, as depicted below.

1.3 Investigations in a recent incident indicated that, if a contact shield is not of a tight-fit type and positively locked in its intended position, vibrations could cause the contact shield to move towards the front of the relay making the barrier between the front and back relay contacts ineffective. In this incident, the contact shield was displaced forward allowing a screw fitting to bridge two contacts, which in turn caused the elevator doors to open outside the door zone.

1.4 Contact shields that could be displaced by vibrations, as described in 1.3, do not meet the intent of “Orders to Contractors” specified in Director’s Ruling #82/90 and Safety Alert #132/98.

2. ORDER TO CONTRACTORS

2.1 Not later than March 1, 1999 (60 days from the date of this bulletin), contractors shall examine all elevator installations under their maintenance, that are equipped with controllers incorporating horizontally mounted Klockner-Moeller or Benedikt+Jager relays fitted with contact shields.

2.2 Contractors shall verify that the contact shields are of a tight-fit type and positively locked or fastened in their intended position at all times, irrespective of the relay vibrations.

2.3 On non-conforming controllers where the potential unsafe condition exist, such as occurrences described in 1.1 or 1.3 above, not later than May 31, 1999 the contractors shall take necessary actions to bring them into compliance with Director’s Ruling #82/90, related to Klockner-Moeller relays or with Safety Alert #136/98, related to Benedikt+Jager relays, as the case maybe. Following this date, non-conforming elevators shall be shut down by TSSA inspectors.

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