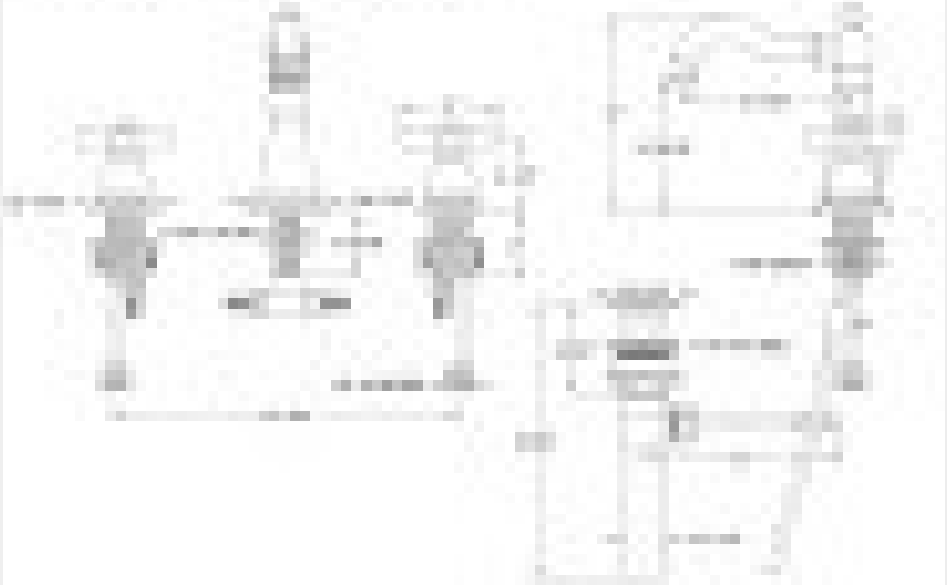FIGURE 12.14 A & B TMC